DOCUMENT RESUME

ED 378 549 CS 011 969

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TITLE Interviewing Children about Their Literacy Experiences: Data from NAEP's Integrated Reading Performance Record (IRPR) at Grade 4.
INSTITUTION Educational Testing Service, Princeton, NJ. Center for the Assessment of Educational Progress.; National Assessment of Educational Progress, Princeton, NJ.
SPONS AGENCY National Center for Education Statistics (ED), Washington, DC.
REPORT NO ISBN-0-88685-162-1 NCES-95-489; NAEP-23-FR-05
PUB DATE Jan 95
NOTE 98p.; For related documents, see CS 011 970-971.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Grade 4; Intermediate Grades; Interviews; *Reading Achievement; *Reading Attitudes; *Reading Habits; Reading Instruction; *Reading Interests; Reading Research; *Recreational Reading
IDENTIFIERS National Assessment of Educational Progress; *Reading Behavior

ABSTRACT

Stemming from the 1992 Integrated Reading Performance Record (IRPR), a study investigated the reading habits and practices and the classroom activities related to reading of a subgroup of students participating in the 1992 reading assessment conducted by the National Assessment of Educational Progress (NAEP). Subjects, 1,136 fourth graders, were audiotaped as they responded to a series of questions about habits and attitudes related to both instructional and recreational reading. Subjects also completed measures of fluency and comprehension. Major findings were that (1) much can be learned and documented about important aspects of reading development through literacy interviews; (2) an overwhelming majority of students reported reading storybooks or magazines, but significantly fewer of them reported reading information books; (3) subjects more frequently reported reading magazines, storybooks, and information books at home than at school or at the library; (4) students who said they spend time reading on their own had higher average reading proficiency than students who said they did not read on their own; (5) students were involved in many different types of activities as a part of reading instruction; and (6) commercially-prepared skills-oriented and short writing tasks were reported to be used more frequently in reading instruction than other types of work. (Contains 13 tables and six figures of data. Appendixes present the interview guide, and a description of the procedures and methods of the IRPR.) (RS)

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Interviewing Children About their Literacy Experiences

Data from NAEP's Integrated Reading Performance Record (IRPR) at Grade 4

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Interviewing Children About their Literacy Experiences

Data from NAEP's Integrated Reading Performance Record (IRPR) at Grade 4

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Report No. 23-FR-05 January 1995

CS011969

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Prepared by Educational Testing Service under contract with the National Center for Education Statistics

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Library of Congress, Catalog Card Number: 94-68492

ISBN: 0-88685-162-9

The work upon which this publication is based was performed for the National Center for Education Statistics, Office of Educational Research and Improvement, by Educational Testing Service.

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Introduction

Reading proficiency is an outgrowth of reading habits and the kinds of exposure that begin with efforts by thoughtful parents and continue with the challenges offered children by their teachers at school. From the first stories read to them, children begin to cherish the pleasures of literacy. The National Assessment of Educational Progress (NAEP), as the nation's only ongoing monitor of the academic performance of American students, has reported since 1971 on students' reading proficiency, and increasingly has augmented these reports with descriptions of how children develop into readers.

This NAEP report, centered on the reading practices of fourth-grade children, is NAEP's most in-depth survey of what — and how — students read. The results stem from the 1992 *Integrated Reading Performance Record* (IRPR), a special study conducted with a subgroup of the fourth graders who participated in the 1992 main NAEP reading assessment. The study is an *integrated* measure of students' home and school experiences as readers, and at the same time a *performance record* of their oral fluency and their perceptions of the reading activities in which they are engaged.

Because of the scope of the data produced by the IRPR and the difference in focus of the two major portions of the study — literacy

experiences and oral reading — the results of the IRPR are presented in two separate reports. This document presents the results of individual interviews with fourth graders' about their literacy habits and practices. A companion report, *Listening to Children Read Aloud*,[1] presents the findings from the oral reading study.

Major Findings of the IRPR Literacy Interviews

Interviewing fourth-grade children about their reading-related practices provides a unique perspective on how literacy develops, and helps to identify those students who may be missing out on important literacy activities. Parents and educators may be especially interested in how these activities relate to overall reading proficiency and what students have to say in reflecting upon their literacy experiences. Developing into a lifelong reader entails acquiring an orientation to reading that demonstrates interest, motivation, and self-awareness related to literacy.[2]

Talking About Literacy. Perhaps one of the most significant findings from this study was how much can be learned and documented about important aspects of reading development through literacy interviews. Talking with children about their reading-related experiences can be revealing of their interests, involvement, and accomplishments in pursuing literacy activities.

Diversity of Reading Experiences. Another important finding from this study was that an overwhelming majority of students reported reading storybooks and magazines (97 and 90 percent); however, significantly fewer of them reported reading information books (77 percent). Diversity in reading experiences appeared to be related to reading comprehension as measured on the main NAEP reading assessment. Those students who reported reading all three types of materials — storybooks, magazines, and information books — had higher average proficiency than their peers with less diverse reading experiences. Furthermore, significantly more students

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[1] Pinnell, G. S., Pikulski, J. J., Wixson, K. K., Campbell, J. R., Gough, P. B., & Beatty, A. S. (1994). *Listening to Children Read Aloud*. National Center for Education Statistics. Washington, DC: Government Printing Office.

[2] Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, I. A. G. (1985). *Becoming a Nation of Readers: The Report of the Commission on Reading*. U. S. Department of Education: The National Institute of Education.

who attended the top-third performing schools than students from the lower-third schools reported reading information books and magazines.

Where Reading Takes Place. Fourth graders more frequently reported reading magazines, storybooks, and information books at home than at school or at the library. While 48 to 72 percent of fourth graders reported reading these materials at home, only 18 to 56 percent said they read them at school. More students in the top-third schools than in the lower-third schools reported reading information books at school.

Writing in Response to Reading. Many fourth graders reported writing journal entries (50 percent), or stories (67 percent), or book reports (72 percent) about things they had read in school. Those students who reported writing book reports had higher average reading proficiency than students who said they had not written book reports. Also, more students attending the top-third schools (79 percent) than students in the lower-third schools (61 percent) said they had written reports about books.

Independent Reading. Another finding from this study, that may have been expected and yet provides important confirmation for educators and parents, was that fourth-grade students who said they spend time reading on their own had higher average reading proficiency than students who said they did not read on their own. Females (94 percent) were more likely to say they read books on their own time than were males (88 percent). The library was a major source for students in obtaining independent reading materials. Seventy-two percent said they got books from the library, 32 percent said they took books home from school, and 35 percent said they read books that were already at home.

Discussing Reading with Others. A majority of students indicated having discussions with other people about the books they read on their own — 51 percent discussed books with teachers, 57 percent discussed books with classmates or friends, and 76 percent discussed books with family or people at home. More students from the top-third performing schools (80 percent) than the lower-third schools (70 percent) reported discussing their independent reading with family members.

Types of Classroom Work in Reading. From the array of classroom reading work that students brought to the IRPR interviews, it appeared that fourth graders were involved in many different types of activities as a part

of reading instruction — both skills-oriented and writing tasks, and both commercially and noncommercially prepared assignments.

Making Decisions About Work Samples. About half of the students (52 percent) said that their teachers decided what work samples would be brought to the interview. Only 14 percent said they made their own decisions and 7 percent reported that they collaborated with their teacher in selecting work samples. Those students who selected work independently had higher average reading proficiency than students with teachers who solely made the decision.

Talking with Students About Their Classroom Work. Commercially prepared skills-oriented and short writing tasks were reported by fourth graders to be used more frequently in reading instruction than other types of work. In describing how they know if they have done a good job on their classroom work in reading, the majority of fourth graders (67 to 75 percent across five types of work) indicated an external source of evaluation, such as their teacher's comments or grades. Most students were able to describe some learning goal for their work samples. Across the five types of work, 49 to 64 percent identified a skill being taught or reinforced in the work they brought to the interview.

Background on the Integrated Reading Performance Record

Over the years, significant shifts have occurred in our knowledge of how reading abilities develop, how reading should be taught, and how reading should be assessed. Reading educators and researchers increasingly agree that the process of reading is not simply a combination of discrete skills, but rather an integrative process that draws on multiple cognitive, affective, and social processes.[3] This view of reading is reflected in the 1992 reading assessment framework underlying both the main assessment and the IRPR special study.[4] The framework describes reading as a dynamic, complex

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[3] Dole, J. A., Duffy, G. G., Roehler, L. R., & Pearson, P. D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research, 61*(2), 239-264.

Tierney, R. J., (1990). Redefining reading comprehension. *Educational Leadership*, 37-42.

[4] National Assessment Governing Board, *Reading Framework for the 1992 and 1994 National Assessment of Educational Progress*. Washington, DC: Government Printing Office.

interaction among the reader, the text, and the context or situation. With this theoretical approach, the NAEP framework calls for an assessment of reading that captures the broadest picture possible of reading literacy.

Educators have come to understand that literacy learning takes place through a broad range of oral and written language activities that must include personally relevant experiences such as thinking critically about reading, reflecting personally on materials read, and learning to interact in literate communities at home and school.[5] For the assessment of reading, this understanding has posed many challenges, which are reflected in a number of recent efforts that incorporate the principles underlying advances in reading theory. For example, innovations in the 1992 NAEP reading assessment included the use of longer, intact texts from a variety of sources typically available to children, and devoted the majority of testing time to constructed-response questions that call on students to produce their own answers.[6] The 1992 NAEP reading assessment framework developed through a national consensus process was based on a view of reading that acknowledges the importance of context and purposes as readers construct meaning from text.[7] Many state assessment programs have also made significant efforts to design measures of reading and literacy that promote effective instruction and capture the full scope of students' behaviors and abilities with regard to literacy.[8]

Beyond these large-scale efforts to make assessment more instructionally relevant, individual classrooms across the country have shown themselves to be fertile ground for cultivating a new generation of assessment techniques. Born out of the need to supply teachers, parents, and students with complete information about literacy development, and nurtured by a realization that traditional, multiple-choice tests provide only a limited "snapshot" of students' abilities, these new approaches to reading

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[5] Ruddell, R. B., & Ruddell, M. R. (1994). Language acquisition and literacy processes. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical Models and Processes of Reading*. Newark, DE: International Reading Association.

[6] Mullis, I. V. S., Campbell, J. R., & Farstrup, A. E., (1993). *NAEP 1992 Reading Report Card for the Nation and the States*. National Center of Education Statistics, Washington, DC: Government Printing Office.

[7] National Assessment Governing Board. *Reading Framework for the 1992 and 1994 National Assessment of Educational Progress*. Washington, DC: Government Printing Office.

[8] O'Neil, J. (1992, May). Putting performance assessment to the test. *Educational Leadership*. 14-19.

Buechler, M. (1992). *Performance assessment*. (Policy Bulletin, No. PB-813), Indiana Education Policy Center: Bloomington, IN.

Moody, D. (1991). *Strategies for statewide student assessment* (Policy Brief, Number 17), Washington, DC: Office of Educational Research and Improvement.

assessment have attempted to transform classroom testing into a meaningful and integral part of instruction. With many of these assessment initiatives, the student is involved in and informed by the process as it unfolds, instead of waiting until the end to receive a single grade that is meant to describe an entire body of work.[9]

In the spirit of these creative and innovative efforts, the IRPR was developed, not only as an extension of the 1992 NAEP reading assessment, but also, as a pacesetter for large-scale, performance-based measures of literacy development. The intention of the 1992 IRPR was to draw on the very latest and best classroom-based assessment techniques and open a larger window into the literacy development of American fourth-grade students within the pragmatic constraints of a large-scale assessment. As an *integrated* measure, the IRPR was designed to combine and examine several important aspects of literacy development — reading habits, reading attitudes, literacy-supportive environments, reading fluency, reading responses, independent reading experiences, and instructional reading activities. As a *performance record*, the IRPR involved students in talking about their reading activities, demonstrating their oral reading fluency, and portraying their understandings through different modes of responding.

The IRPR clearly fits in with several goals for assessment recently identified in the reading community. One of these goals, to make assessment mirror real-life experiences, grows out of an understanding that "authentic challenges . . . are inherently ambiguous and open-ended."[10] The major limitation of many tests is that they presuppose a "right" answer and often, unnaturally constrain students' options for responding. Reading educators have long recognized that all readers bring unique background experiences and knowledge to their reading interpretations, and thus construct meanings from text that may differ from those understood by other readers.[11] While the format of the main portion of the 1992 NAEP reading assessment addressed this issue by providing considerable scope for

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[9] Valencia, S. W., Hiebert, E. H., & Afflerbach, P. P. (Eds.). (1994). *Authentic Reading Assessment: Practices and Possibilities*. Newark, DE: International Reading Association.

[10] Wiggins, G. (1989, May). A true test: Toward more authentic and equitable assessment. *Phi Delta Kappan*, p. 706.

[11] Smith, M. W. (1991). Constructing meaning from text: An analysis of ninth-grade reader responses. *Journal of Educational Research, 84*, 263-271.

Spiro, R. J. (1980). Constructive processes in prose recall, In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), *Theoretical Issues in Reading Comprehension*. Hillsdale, NJ: Erlbaum.

Rosenblatt. L. (1978). *The reader, the text, and the poem*. Cambridge, MA: Harvard.

students to construct written responses to reading tasks, the IRPR takes the goal a step further. Students were asked to respond orally to some of the same questions they were asked to write about in the main assessment, a task that replicates the way in which many readers typically respond to reading — by talking about it with someone else. Through reading-related conversations such as those in the IRPR, not only can in-depth information be collected, but students also can receive support for pursuing literacy-related activities and experience success with different modes of communication.

IRPR data can also be used to flesh out existing background data about students' experiences both in the classroom and out of school. For example, the written background questionnaire in the main assessment asks students about how often they do certain activities in reading class. The IRPR expands on this with more detailed interview questions about the students' reading of texts and reading class activities, supported by samples of students' classroom work. Similarly, the main assessment asks how often students read outside of school, while the IRPR explores the kinds of materials students read, where they read them, and the like.

Developing the Integrated Reading Performance Record

NAEP convened a committee of prominent reading researchers and educators with extensive and diverse backgrounds in the areas of reading fluency, reading assessment, and literacy development to oversee the development, administration, and reporting of the IRPR (see Appendix B). Its goal was to design an assessment tool that would emulate current understandings about effective classroom assessment and provide a method for collecting important information about the state of literacy among America's fourth-grade students. In addition, because this was the first large-scale attempt to study oral reading fluency, the committee drew on the extant research to develop the most appropriate oral reading analysis procedures for an assessment of this scale.

Initial planning for the project began in early 1990 and culminated with a field test of the IRPR in 1991. Results of this field test along with first-hand observations and feedback from IRPR administrators were used to refine the instrument. Once again, this process was overseen by the development committee. The IRPR interviews of fourth graders were conducted in 1992 and the findings presented in this report were the result of that data collection effort.

Administration of the Integrated Reading Performance Record

The IRPR interviews were conducted with a subsample of the fourth graders who took the main assessment. A total of 1,136 fourth graders who were interviewed provided responses that could be coded and scored. This sample represented 68 percent of all students who had been identified to participate in the IRPR. Clearly, this lower-than-expected participation rate was of some concern in reporting the results of this study. However, it was determined that students who participated were not substantially different on any of the demographic characteristics from the total population of fourth-grade students in the nation; thus, the IRPR sample was considered to be nationally representative of fourth graders. (Information regarding the participation rate and important demographic characteristics of students who were sampled is contained in Appendix B.) The relatively high nonparticipation rate was attributed to several factors, the most important of which appears to have been the practical difficulties of handling and shipping the array of materials (i.e., folders with work samples, audio tapes, interview guides) across the country to a central location. This may be an example of the logistical problems inherent in conducting large-scale, performance-based studies like this one.

Each student participated in an individual, one-on-one assessment session with a trained administrator. The sessions consisted of a series of questions about habits and attitudes related to both instructional and recreational reading, as well as measures of fluency and comprehension. These sessions were taped and transcribed later for evaluation. As a result, minimal note-taking was required on the part of the administrator, allowing for a more natural, relaxed environment in which to conduct the interviews. Each individual session consisted of an introduction by the administrator and three major sections. (The IRPR administrator's guide is presented in Appendix A.)

Introduction. During the introduction, students were welcomed and made familiar with how the session would be conducted. They were then asked to read aloud a brief passage from a *Highlights* magazine that had been determined to be relatively easy for typical fourth-graders. This served both to familiarize them with the tape recording process and to enable the interviewer to determine whether the student should be asked to read aloud from the more difficult assessment passage later in the interview. If the student seemed to have considerable trouble reading aloud from the less difficult initial passage, he or she was not asked to read the more difficult passage because the experience might be frustrating and unpleasant.

Reading Habits and Practices Interview. After the introduction the student was asked about his or her habits and attitudes related to both recreational and instructional reading. The student was shown pictures of various types of reading materials (storybooks, magazines, information books) and asked about his or her experiences with those types of materials. Students were asked to bring to the session a book they were currently reading or had recently finished. During the session, they were engaged in a conversation about these reading materials. Questions focused on how much the students enjoyed these books and how well they understood them. The students were also instructed to bring the books they were currently using during reading instruction in the classroom. They were asked about reading class activities and their reactions. Results from this portion of the study are presented in Chapter 1 of this report.

Fluency and Comprehension Assessments. The next section of the interview was the fluency and comprehension study; students read a passage from the main assessment silently, answered questions about it orally, and then read the passage aloud. The oral reading was later analyzed for accuracy, reading rate, and overall fluency. The findings from the oral reading portion of the IRPR are presented in the companion report, *Listening to Children Aloud.* The results of comparing students' verbal responses in the IRPR and their written responses in the main NAEP assessment appear in another NAEP publication, *Reading Assessment Redesigned: Authentic Texts and Innovative Instruments in NAEP's 1992 Survey* (in press).

Classroom Work Samples Interview. The final section of the IRPR was a discussion with students about examples of the classroom work they brought to the interview. Students were asked about the purpose of the activities, what had been learned from the activities, how frequently they did such work, and how they knew they had done a good job. The examples of classroom work were collected and analyzed later. Information about classroom work samples is presented in Chapter 2 of this report.

The IRPR Reports

The information obtained from these interviews was linked to data from the main assessment, including the overall reading proficiency of students participating in the IRPR study, their background information, and the responses of their teachers and school administrators to questionnaires.

A summary of these findings is presented within this document and in an additional IRPR report. Given the broad scope of information gathered, two reports have been written to focus on the two major areas of interest within the IRPR — interview results about reading habits and instruction, and oral reading results. This report, *Interviewing Children About Their Literacy Experiences*, provides results of the conversations conducted with fourth graders in the IRPR study about their reading habits and practices and their classroom activities related to reading. It also describes how these literacy experiences relate to students' overall reading proficiency as determined by their performance in the main portion of the 1992 reading assessment.

The other report, *Listening to Children Read Aloud*, focuses specifically on the oral reading fluency portion of the IRPR. That report provides a thorough discussion of the rationale for assessing students' oral reading abilities and the procedures used in conducting such an assessment, and presents the results of the oral reading study. Taken together, the two 1992 IRPR reports provide a rich source of information about how our fourth-grade students are developing as readers and literate citizens.

Outline of This Report. In comparison with a written questionnaire, the IRPR interviews provide a closer examination of the reading activities of fourth graders in and out of school. A summary of this information is presented in this report, along with data about the children's reading proficiency on the main NAEP reading assessment, which in turn makes it possible to evaluate the IRPR data in terms of its implications for schools and communities.

Chapter One of this report describes the reading practices and habits of the country's fourth graders and how these literacy events were associated with reading proficiency. Chapter Two takes a close look at the samples of classroom activities that students brought to the IRPR interviews and discussed with the administrator. Students' conversations about their class work were suggestive of the typical instruction in reading received by fourth graders. Finally, Chapter Three provides a synthesis of the findings from the interview portion of the IRPR as well as a discussion of the implications for schools and communities.

1

Reading Habits and Practices

Students develop into readers within various contexts and situations. While it is critical that students have multiple reading experiences in school — both independent and instructional — research has demonstrated the importance of additional reading experiences outside of school for helping students to acquire the habits, attitudes, and skills that are characteristic of life-long readers/learners.[12] Moreover, for students to gain the breadth of literacy abilities necessary to succeed in school and beyond, these independent reading experiences should be diverse.[13]

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[12] Watkins, M. W., & Edwards, V. A. (1992). Extracurricular reading and reading achievement: The rich stay rich and the poor don't read. *Reading Improvement, 29*, 236-242.

Greene, B. G. (1990). Independent reading. *Ohio Reading Teacher, 24*(4), 43-46.

Anderson, R. C., Wilson, P. T., & Fielding, L. G. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly, 23*, 285-303.

[13] Hartman, D. K., & Hartman, J. A. (1993). Reading across texts: Expanding the role of the reader. *The Reading Teacher, 47*(3), 202-211.

The Integrated Reading Performance Record was designed to include interviews, in which fourth grade students discussed their diverse reading experiences — from magazines to storybooks to information books, as illustrated here.

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One way to document students' growth in these vital areas of literacy development is to have conversations with them about their habits and practices related to reading. Such an approach is being used increasingly due to the recognition that reading development involves, not only abilities, but attitudes and orientations to literacy that contribute to students' motivation.[14] Furthermore, practical applications of literacy interviews have been shown to benefit students in becoming more self-reflective and aware of their own progress.[15]

The 1992 IRPR interviews included a series of questions about fourth graders' reading experiences — both in and out of school. The intent of these questions was to gain a clearer picture of the kinds of reading activities in which fourth graders in this country engage, and the relationship between these activities and reading proficiency. While many of the results presented are from students' self-reports, an understanding of what activities children say characterize their literacy development provides important insight as educators and parents seek to enhance the literacy environment for students.

Reading Different Types of Materials

To ascertain the breadth of students' exposure to various types of reading materials, students were first shown three separate pictures depicting different types of reading materials: magazines, books that tell a story, and books that give information (see page 12). For each picture, they were asked if they ever read that type of material, if they could name some examples from their own reading, and where they read this kind of text. Table 1.1 presents the percentages of students indicating they had read the three types of reading materials. Data are presented for the nation as well as for gender, race/ethnicity, and school performance ranking, as determined by the main portion of the 1992 reading assessment.[10] In addition, the table provides the

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[14] Valencia, S. W., Hiebert, E. H., & Afflerbach, P. P. (Eds.). (1994). *Authentic Reading Assessment*. Newark, DE: International Reading Association.

Paris, S. G., Calfee, R. C., Filby, N., Hiebert, E. H., Pearson, P. D., Valencia, & Wolf, K. P. (1992). A framework for authentic literacy assessment. *The Reading Teacher, 46*(2), 88-98.

[15] Sorenson, N. L. (1993). Holistic evaluation of literacy development: Framing the process. *Reading Research and Instruction, 32*(4), 66-75.

Hebert, E. A. (1992, May). Portfolios invite reflection — from students and staff. *Educational Leadership*. 58-61.

[16] Top and bottom one-third schools are calculated by computing a mean for each school, then ranking and dividing the schools into thirds. Thus, the top or bottom one-third schools may each contain more or less than one-third of the students.

average proficiency of these students as determined by their performance on the main NAEP assessment. Data for Asian/Pacific Islander and American Indian students cannot be reported reliably, because only a small number of students from these groups participated in the IRPR.

Table 1.1 — Reading Experiences with a Variety of Materials

Percentages and Average Proficiency of Students Reporting Experiences with Different Reading Materials by Gender, Race/Ethnicity, and School Ranking, Grade 4, 1992 NAEP Integrated Reading Performance Record

			EVER READ MAGAZINES?		EVER READ STORY BOOKS?		EVER READ INFORMATION BOOKS?	
	Average Proficiency		Yes	No	Yes	No	Yes	No
Nation	218 (1.0)	%	90 (1.0)	10 (1.0)	97 (0.5)	2 (0.4)	77 (1.9)	22 (1.8)
		Prof.	220 (1.8)	205 (4.0)	219 (1.8)	219 (6.8)	223 (1.9)	204 (3.0)
Gender								
Male	214 (1.2)	%	91 (1.2)	8 (1.0)	97 (0.8)	2 (0.7)	77 (2.4)	22 (2.3)
		Prof.	215 (2.2)	197 (5.6)	214 (2.2)	213 (8.8)	218 (2.6)	201 (5.0)
Female	222 (1.0)	%	89 (1.4)	11 (1.5)	97 (0.7)	2 (0.6)	76 (2.4)	23 (2.2)
		Prof.	226 (2.4)	211 (5.0)	224 (2.1)	227(12.1)	229 (2.2)	208 (3.3)
Race/Ethnicity								
White	226 (1.2)	%	91 (1.1)	8 (1.1)	97 (0.6)	2 (0.6)	79 (2.3)	20 (2.1)
		Prof.	228 (2.1)	212 (5.3)	226 (2.1)	227 (7.0)	230 (2.0)	212 (3.9)
Black	193 (1.7)	%	86 (2.9)	13 (2.9)	99 (0.6)	0 (0.0)	69 (4.2)	30 (4.0)
		Prof.	196 (3.6)	190(11.1)	196 (3.7)	•••	202 (4.0)	182 (7.6)
Hispanic	202 (2.2)	%	85 (3.2)	14 (3.2)	96 (1.2)	3 (1.2)	70 (4.0)	28 (4.0)
		Prof.	206 (3.9)	194 (7.5)	205 (3.6)	176(20.5)	206 (4.0)	197 (6.2)
School Ranking								
Top Third	237 (1.3)	%	95 (1.2)	4 (1.2)	98 (0.7)	2 (0.7)	87 (2.0)	12 (1.9)
		Prof.	239 (2.4)	235 (6.6)	238 (2.5)	243(11.9)	239 (2.4)	234 (5.8)
Middle Third	218 (0.8)	%	90 (1.8)	10 (1.7)	97 (0.8)	2 (0.7)	75 (3.3)	24 (3.1)
		Prof.	219 (2.5)	208 (4.6)	218 (2.4)	222 (7.5)	222 (2.3)	207 (4.0)
Lower Third	195 (1.6)	%	84 (2.2)	16 (2.2)	97 (0.8)	2 (0.7)	67 (2.8)	32 (2.6)
		Prof.	198 (2.2)	192 (6.5)	197 (2.3)	194(15.5)	201 (2.6)	188 (4.6)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages less than 0.5 percent were rounded to 0 percent. Percentages may not total 100 percent due to rounding error.

••• Sample size insufficient to permit reliable estimate.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

For the nation, more fourth graders (97 percent) indicated having read books that tell a story than reported reading magazines (90 percent) or information books (77 percent). For male, female, as well as for White, Black, and Hispanic students, nearly all (96 to 99 percent) appeared to have experience with reading storybooks. Furthermore, this pattern was consistent for students from schools across the performance distribution — lower-, middle-, and top-third. However, exposure to magazines and information books varied somewhat between higher- and lower-performing schools. Significantly more fourth graders from the top-third schools than from the lower-third schools had read magazines (95 percent compared to 84 percent) and information books (87 percent compared to 67 percent). This may indicate that students from the lower-third schools are exposed to a less diverse range of reading materials than is afforded students from the top-third schools. It is important to remember that these data alone may not reveal to what extent observed differences could be due to social environment factors that affect accessibility and uses of literacy materials.

Those fourth graders who did report having experiences with magazines and information books had higher average reading proficiencies than students who said they had never read these types of reading materials. It may be that those students who were exposed to more than just storybooks had benefitted from these broader literacy experiences. This would be consistent with several studies indicating the benefit of a wide exposure to different types of reading.[17] It is also possible, however, that the more proficient readers found certain reading activities to be easier and more enjoyable, and thus, pursued these activities to a greater extent than did less proficient readers.

Follow-up analysis of students' exposure to various types of reading materials shows the percentages of fourth graders who reported that they had read all three types, two types, one type, or none of the types presented in the interview. These percentages are presented in Table 1.2 along with the average reading proficiencies of students in each of the categories.

Since magazines, storybooks, and information books represent three of the most prominent types of literacy materials that might be available to students, it may be of some concern that nearly one-third (31 percent) of

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[17] Pappas, C. C. (1991). Fostering full access to literacy by including information books. *Language Arts, 68*, 449-462.

Fielding, L., Wilson, P., & Anderson, R. (1986). A new focus on free reading: The role of trade books in reading instruction. In T. Raphael (Ed.), *The Contexts of School-Based Literacy*, 149-160. New York: Random House.

fourth graders indicated they had read only two or fewer of the three types. These students may already be at some disadvantage, since by the fourth grade they have yet to encounter at least one major form of reading material.

Table 1.2 — Number of Different Types of Materials Read

Percentages and Average Proficiencies of Students Reporting Experiences with Various Amounts of Reading Material Types (Magazines, Information Books, Story Books), Grade 4, 1992 NAEP Integrated Reading Performance Record

NUMBER OF DIFFERENT TYPES OF MATERIALS STUDENTS REPORTED READING							
NONE		ONE		TWO		THREE	
Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
2 (0.4)	197 (8.4)	4 (0.7)	195 (5.9)	25 (2.0)	210 (3.0)	69 (2.2)	224 (1.9)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment Integrated Reading Performance Record

The relationship between average reading proficiency and exposure to more types of reading materials supports the research findings regarding the effectiveness of varied reading experiences for developing readers.[18] Those fourth graders who said they had read all three types of reading materials had significantly higher average reading proficiency than any of the other groups of students with fewer literacy experiences.

Where Reading Takes Place

A follow-up question was asked to further investigate where students read different types of materials. Three specific locations were targeted —

[18] Harris, V. J. (1993). Literature-based approaches to reading instruction. In L. Darling-Hammond (Ed.). *Review of Research in Education*. Washington, DC: American Educational Research Association.

home, school, and library. The percentages of students reporting having read magazines, storybooks, and information books in these three locations are presented in Table 1.3.

Many students indicated reading different materials in more than one place. However, it appeared that the home was central to many of their literacy experiences. More students reported reading each type of material in the home than reported reading these materials in school or in a library. While it is encouraging that 69 percent of students were reading magazines, 72 percent were reading storybooks, and 48 percent were reading information books in their homes, it may be of some concern that one-fourth to one-half of fourth-grade students expressed that they had never engaged in these literacy activities at home.

Table 1.3 — Where Fourth Graders Read

Percentages of Students Reporting That They Have Read Different Types of Reading Materials at Home, School, and the Library by Gender, Race/Ethnicity, and School Ranking, Grade 4, 1992 NAEP Integrated Reading Performance Record

	"WHERE DO YOU READ. . ."								
	MAGAZINES?			STORY BOOKS?			INFORMATION BOOKS?		
	Home	School	Library	Home	School	Library	Home	School	Library
Nation	69 (2.1)	18 (1.5)	9 (1.1)	72 (1.7)	56 (2.0)	11 (1.2)	48 (2.4)	34 (2.2)	14 (1.3)
Gender									
Male	70 (2.9)	20 (2.1)	9 (1.6)	70 (2.3)	54 (2.7)	9 (1.3)	51 (2.8)	32 (2.4)	13 (1.5)
Female	68 (2.4)	15 (2.2)	9 (1.3)	74 (2.1)	58 (3.2)	12 (1.7)	44 (3.1)	34 (3.0)	14 (1.8)
Race/Ethnicity									
White	71 (2.6)	17 (2.0)	8 (1.3)	74 (2.1)	58 (2.4)	7 (1.4)	50 (2.9)	36 (2.5)	12 (1.5)
Black	58 (3.8)	19 (3.5)	13 (2.7)	66 (3.5)	58 (4.0)	22 (3.3)	40 (4.7)	24 (3.4)	17 (3.2)
Hispanic	67 (3.9)	14 (2.9)	10 (3.0)	67 (4.7)	45 (4.2)	17 (4.0)	40 (4.9)	29 (4.8)	14 (2.7)
School Ranking									
Top Third	75 (2.8)	14 (2.8)	8 (2.0)	77 (2.4)	57 (4.0)	10 (2.3)	55 (3.6)	39 (3.9)	14 (2.5)
Middle Third	70 (3.8)	19 (2.4)	9 (1.4)	75 (2.9)	58 (3.1)	5 (1.3)	46 (3.8)	35 (3.1)	14 (1.7)
Lower Third	61 (3.2)	20 (2.2)	11 (1.9)	63 (3.6)	52 (3.5)	19 (2.6)	40 (3.4)	25 (3.6)	12 (2.1)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment Integrated Reading Performance Record

Perhaps more surprising, however, are the small percentages of students who reported being exposed to these materials in their school. With regard to school reading experiences, only 18 percent of the fourth graders said they read magazines, just over one-half (56 percent) of students said they read storybooks, and only about one-third (34 percent) indicated having read information books at school. While other reading activities may be occurring as a part of instruction (e.g., basal and workbook passages), many fourth-grade students reported not being involved in additional reading experiences with materials in "real world" formats. Throughout the literature on reading instruction and learning, opportunities to read are described as paramount for students to practice and refine their developing abilities.[19]

Some significant differences in where students read were evident for race/ethnicity and level of school performance. More White fourth graders reported reading magazines at home (71 percent) than did Black students (58 percent). White fourth graders were also more likely than their Black counterparts to have exposure to information books at school — 36 percent compared to 24 percent. Also, significantly more White students (58 percent) than Hispanic students (45 percent) reported reading storybooks at school. However, White students' use of libraries as a place to read storybooks was significantly less. Only 7 percent of White fourth graders said they read this type of material in a library, compared to 17 percent of Hispanic students and 22 percent of Black students. The observed racial differences in students' use of the library may, in part, reflect the increased availability of public libraries for children in urban communities.

For each type of reading material — magazines, storybooks, information books — more students in the top-third schools (from 55 to 77 percent) than from the lower-third schools (from 40 to 63 percent) reported having read them in their homes. Also, fourth graders in top-performing schools were more likely than those in lower-third schools to report that they read information books in school — 39 percent compared to 25 percent. Libraries as a location for reading storybooks displayed a slightly different pattern, however. Significantly more students (19 percent) from the lower-third schools reported that they used libraries as a place to

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[19] Kucer, S. B., (1991). Authenticity as the basis for instruction. *Language Arts, 68,* 532-547.

Winograd, P., & Greenlee, M. (1986, April). Students need a balanced reading program. *Educational Leadership,* 16-21.

Mendak, P. A. (1986). The use of silent reading in the primary grades. *The Reading Teacher,* 636-639.

read storybooks compared to students attending either the middle- (5 percent), or top-third (10 percent) schools. For students who may be considered at-risk, it is possible that the library is an important resource for reading materials and a conducive environment for literacy experiences.

Writing in Response to Reading

The importance of integrating writing and reading as complementary literacy activities has been stressed repeatedly by reading educators and researchers.[20] Some theorists have come to view both reading and writing as similar, constructive processes that result in the building of meaning and generation of new ideas.[21] Many of these researchers suggest that as students write about what they have read, they are engaged in thinking about the text and they are formulating interpretations that continue to evolve as writing proceeds. A positive relationship between writing and reading abilities has been confirmed in recent NAEP publications.[22] While it is unclear from NAEP data whether writing activities enhance reading comprehension or whether better readers are given more opportunities to write about what they read, the connection has been supported by other research.[23]

Fourth-grade students in the 1992 NRPR were asked about writing in response to reading. Specifically, they were asked if they had written book reports, stories, or journal entries as a part of a reading assignment in their reading class. The percentages and average proficiencies of students indicating these experiences are presented in Table 1.4.

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[20] Cullinan, B. E. (Ed.). (1993). *Pen in Hand: Children Become Writers.* Newark, DE: International Reading Association.

[21] Langer, J. A. (1986). Reading, writing, and understanding: An analysis of the construction of meaning. *Written Communication, 3*(2), 219-267.

Squire, J. R. (1983). Composing and comprehending: Two sides of the same basic process. *Language Arts, 60,* 581-589.

Tierney, R. J., Pearson, P. D. (1983). Toward a composing model of reading. *Language Arts, 60,* 568-580.

[22] Mullis, I. V. S., Campbell, J. R., & Farstrup, A. E. (1993). *NAEP 1992 Reading Report Card for the Nation and the States.* National Center for Education Statistics. Washington, D.C.: Government Printing Office.

Foertsch, M. A. (1992). *Reading In and Out of School.* National Center for Education Statistics. Washington, DC: Government Printing Office.

[23] Comstock, M. (1992). Poetry and process: The reading/writing connection. *Language Arts, 69,* 261-267.

Dana, M.E., Sheffler, A.J., Richmond, M.G., Smith, S., & Draper, H.S. (1991). Writing to read: Pen palling for a purpose. *Reading Improvement, 28,* 113-118.

Table 1.4 — Writing in Response to Reading

Percentages and Average Proficiency of Students Reporting Different Types of Writing Activities in Response to Reading, Grade 4, 1992 NAEP Integrated Reading Performance Record

		HAVE YOU WRITTEN BOOK REPORTS ABOUT THINGS YOU HAVE READ?		HAVE YOU WRITTEN STORIES ABOUT THINGS YOU HAVE READ?		HAVE YOU WRITTEN JOURNAL ENTRIES ABOUT THINGS YOU HAVE READ?		HAVE YOU WRITTEN ANYTHING ELSE ABOUT THINGS YOU HAVE READ?	
		Yes	No	Yes	No	Yes	No	Yes	No
Nation	%	72 (1.7)	24 (1.6)	67 (1.8)	26 (1.7)	50 (2.6)	42 (2.4)	28 (1.8)	59 (2.2)
	Prof.	222 (2.1)	212 (2.3)	220 (2.0)	216 (2.9)	222 (2.4)	216 (2.5)	225 (2.7)	217 (2.2)
Gender									
Male	%	73 (2.2)	23 (2.0)	67 (2.5)	27 (2.3)	48 (2.9)	44 (2.7)	26 (2.5)	62 (2.5)
	Prof.	217 (2.4)	206 (4.5)	213 (2.5)	214 (4.0)	216 (2.2)	212 (3.7)	218 (4.2)	213 (2.6)
Female	%	71 (2.8)	25 (2.6)	67 (2.3)	25 (2.3)	52 (3.6)	40 (3.2)	31 (2.2)	56 (2.8)
	Prof.	227 (2.6)	217 (3.9)	227 (2.3)	219 (3.7)	228 (3.2)	221 (2.5)	231 (3.2)	221 (2.9)
Race/Ethnicity									
White	%	73 (1.8)	24 (1.6)	68 (1.9)	25 (1.9)	52 (3.3)	41 (2.9)	29 (2.1)	58 (2.5)
	Prof.	229 (2.5)	219 (2.9)	227 (2.2)	224 (4.1)	228 (2.8)	224 (2.5)	233 (2.9)	223 (2.6)
Black	%	68 (4.6)	26 (4.3)	63 (4.7)	28 (4.3)	43 (4.5)	48 (4.5)	28 (3.2)	57 (4.0)
	Prof.	199 (4.3)	190 (5.8)	195 (4.0)	196 (7.1)	203 (4.6)	190 (5.7)	200 (6.4)	194 (4.5)
Hispanic	%	70 (4.1)	25 (4.2)	64 (5.1)	26 (4.1)	46 (4.8)	43 (4.7)	24 (4.6)	66 (4.7)
	Prof.	205 (3.3)	202 (7.1)	207 (4.2)	200 (6.6)	205 (5.6)	208 (5.7)	205 (6.4)	204 (3.8)
School Ranking									
Top Third	%	79 (2.7)	18 (2.7)	69 (3.2)	22 (3.0)	52 (5.7)	40 (5.3)	33 (3.0)	58 (3.4)
	Prof.	240 (2.5)	234 (5.5)	239 (2.6)	240 (3.7)	242 (3.2)	235 (3.4)	241 (3.7)	238 (3.3)
Middle Third	%	74 (2.8)	22 (2.4)	68 (2.7)	26 (2.6)	52 (3.2)	41 (3.3)	26 (2.7)	58 (3.4)
	Prof.	220 (2.3)	215 (4.3)	218 (2.3)	218 (4.3)	219 (2.5)	218 (3.4)	226 (4.8)	215 (2.3)
Lower Third	%	61 (3.5)	34 (3.4)	62 (3.7)	31 (3.3)	46 (4.6)	46 (4.0)	27 (3.1)	61 (3.6)
	Prof.	198 (2.2)	196 (4.0)	198 (2.6)	196 (4.6)	200 (3.0)	195 (3.3)	202 (4.1)	195 (2.3)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). Percentages do not total 100 percent due to a 3 to 15 percent nonresponse rate. Nonresponses were the result of students responding "I don't know," providing a inaudible/uncodable response, or not being asked the question.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

The majority of fourth-grade students appear to have engaged in some writing activities in conjunction with reading. More than two-thirds of the students said they had written book reports (72 percent) and stories (67 percent) about things they had read. One-half (50 percent) said they had written journal entries and 28 percent reported that they had written something else about things they had read. For the nation, those students who said that they had either written book reports or "anything else" about what they had read had higher average reading proficiencies than their peers who had not reported doing these same reading/writing activities. In addition, there were significantly more students in the top- and middle-third schools than in the lower-third schools who said they had written book reports as a part of instruction.

Choosing to Read Independently

While the quality of reading instruction and the opportunities provided for students to develop as readers in school are extremely critical, the independent reading habits and attitudes demonstrated by young readers certainly can be as important. Independent or recreational reading has been linked to students' overall reading achievement in several studies.[24] Obviously, the link between recreational reading and reading achievement may be somewhat complex. While some research has suggested that reading may be considered a cause, not merely a reflection of reading proficiency,[25] the connection may also be due to the proficient readers' likely propensity for engaging in more reading experiences. Pursuing literacy activities on one's own time may indicate a level of comfort and confidence that can facilitate later attempts at more advanced educational experiences.

Students in the IRPR interview were asked a series of questions about their independent reading habits. Not only were they asked if they spend time reading on their own besides their school assignments, they were also

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[24] Watkins, M. W., & Edwards, V. A. (1992). Extracurricular reading and reading achievement: The rich stay rich and the poor don't read. *Reading Improvement, 29*(4), 236-242.

Huck, Charlotte, S. (1992). Literacy and literature. *Language Arts, 69*(7), 520-526.

Taylor, B. M., Frye, B. J., & Marugama, M. (1990). Time spent reading and reading growth. *American Educational Research Journal, 27*, 351-362.

Greaney, V. (1980). Factors related to the amount and type of leisure time reading. *Reading Research Quarterly, 15*, 337-357.

[25] Anderson, R.C., Wilson, P.T., & Fielding, L.G. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly, 23*, 285-303.

asked about subsequent discussions they may have about these recreational reading activities, and where these recreational reading materials are obtained. Table 1.5 presents the percentages and average proficiency of students reporting whether or not they ever read books on their own time.

Table 1.5 — Reading Books on Their Own Time

Percentages and Average Proficiency of Students Reporting Reading Other Books on Their Own Time Besides the Ones Assigned by Their Teachers, Grade 4, 1992 NAEP Integrated Reading Performance Record

	YES		NO	
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Nation	91 (1.4)	220 (1.8)	7 (1.2)	202 (6.0)
Gender				
Male	88 (1.8)	215 (2.2)	11 (1.8)	200 (7.4)
Female	94 (1.3)	225 (2.1)	4 (1.0)	205 (6.6)
Race/Ethnicity				
White	92 (1.4)	227 (2.0)	6 (1.2)	210 (7.8)
Black	89 (2.7)	197 (3.7)	10 (2.6)	184(12.0)
Hispanic	87 (2.8)	206 (3.9)	12 (2.7)	189(11.1)
School Ranking				
Top Third	93 (2.7)	239 (2.5)	6 (2.7)	238 (6.3)
Middle Third	92 (1.6)	219 (2.4)	6 (1.2)	206 (8.1)
Lower Third	87 (1.7)	200 (2.2)	11 (1.4)	175 (7.0)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). Percentages do not total 100 percent due to a 1 to 2 percent nonresponse rate. Nonresponses were the result of students providing a inaudible/uncodable response, or not being asked the question.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

For the nation, fourth-graders' reports about reading on their own indicated that most students (91 percent) at this age engaged in recreational reading. Furthermore, those students who reported recreational reading demonstrated higher reading proficiency than those students who said they did not read books on their own time. Although a significant difference was not observed across all the reporting groups, the national findings are quite consistent with other studies, including previous NAEP reports,

documenting a positive relationship between independent reading and reading achievement.[26]

There was a significant difference between the percentage of female and male fourth-grade students reporting that they chose to spend their own time reading. More female students (94 percent) than male students (88 percent) reported that they read books on their own time. This may have been related to female students' higher average reading proficiency. However, there were no significant differences between race/ethnicity groups for independent reading, nor were there significant differences by performance levels of schools.

Reading as a Social Activity

There has been considerable interest in the social aspect of reading and literacy in recent years.[19] One reason for this emphasis is the realization that students learn to read in classrooms that could be described as communities centered around literacy and learning. In such an environment, developing readers come to recognize the diversity and commonality of interpretations and meanings that can result from shared reading experiences.[20] The social importance of reading, however, extends beyond the classroom as students communicate with families and friends about their literacy endeavors. Young children learn about the uses and values of literacy through interactions with parents and people close to them.[29] Since these less structured social encounters may be more focused on young readers' interests and personal choices, they may serve as significant reinforcement

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[26] Foertsch, M. A. (1992). *Reading In and Out of School*. National Center for Education Statistics. Washington, DC: Government Printing Office.

Mullis, I.V.S., Campbell, J.R.., & Farstrup, A.E. (1993). *NAEP 1992 Reading Report Card for the Nation and the States*. National Center for Education Statistics. Washington, DC: Government Printing Office.

[27] Morrow, L. M., & Paratore, J. (1993). Family literacy: Perspective and practices. *The Reading Teacher, 47*(3), 194-200.

Englert, C. S., & Palincsar, A. S. (1991). Reconsidering instructional research in literacy from a sociocultural perspective. *Learning Disabilities Research and Practice, 6*(4), 225-229.

[28] Knoeller, C. P. (1994). Negotiating interpretations of text: The role of student-led discussions in understanding literature. *Journal of Reading, 37*(7), 572-580.

Leal, D. J. (1993). The power of literary peer-group discussions: How children collaboratively negotiate meaning. *The Reading Teacher, 47*(2), 114-120.

[29] Rogoff, B. (1990). *Apprenticeship in Thinking*. New York: Oxford University Press.

of literate behavior. Several studies have documented that proficient readers are more likely than others to discuss their reading both in school and outside of school.[30]

Thus, as a follow up to the question about reading books on their own time and as an attempt to begin to explore the social contexts for literacy development, this study also posed a question about students' social habits related to independent reading. Specifically, students were asked if they ever talk with classmates or friends, teachers, or family about books that they have chosen to read. Percentages of students engaging in these dialogues and their average proficiencies are presented in Table 1.6.

[30] Rowe, K. J. (1991). The influence of reading activity at home on students' attitudes toward reading, classroom attentiveness, and reading achievement: An application of structural equation modeling. *British Journal of Education Psychology, 61*, 19-35.

Miller, I. B. (1986). *Parental Involvement Affects Reading Achievement of First, Second, and Third Graders.* (PY: 1986). Indiana University at South Bend.

Table 1.6 — Discussing Books They Have Chosen

Percentages and Average Proficiency of Students Reporting Discussions about Books They Have Chosen, Grade 4, 1992 NAEP Integrated Reading Performance Record

		DISCUSSIONS WITH CLASSMATES OR FRIENDS		DISCUSSIONS WITH TEACHERS		DISCUSSIONS WITH FAMILY OR PEOPLE AT HOME	
		Yes	No	Yes	No	Yes	No
Nation	%	57 (1.7)	39 (1.7)	51 (2.1)	43 (1.9)	76 (1.6)	20 (1.4)
	Prof.	220 (2.2)	218 (2.2)	220 (2.1)	219 (2.5)	221 (2.1)	214 (2.9)
Gender							
Male	%	56 (2.3)	40 (2.2)	49 (2.8)	45 (2.6)	70 (2.0)	25 (1.8)
	Prof.	215 (2.7)	213 (3.4)	214 (2.7)	215 (3.4)	216 (2.6)	210 (3.7)
Female	%	59 (2.2)	37 (2.2)	53 (2.9)	41 (2.9)	81 (2.2)	15 (2.0)
	Prof.	226 (2.7)	223 (2.9)	225 (2.7)	223 (3.3)	225 (2.5)	220 (4.0)
Race/Ethnicity							
White	%	58 (2.0)	38 (2.0)	50 (2.6)	45 (2.4)	77 (1.9)	19 (1.5)
	Prof.	227 (2.5)	226 (2.7)	228 (2.5)	224 (2.9)	228 (2.4)	220 (3.5)
Black	%	52 (4.1)	43 (4.0)	54 (3.7)	39 (3.3)	73 (3.4)	22 (3.5)
	Prof.	201 (3.8)	191 (6.6)	195 (5.0)	199 (5.9)	198 (4.3)	196 (7.7)
Hispanic	%	54 (4.8)	40 (4.7)	56 (4.5)	37 (4.1)	71 (3.9)	24 (3.8)
	Prof.	201 (4.2)	209 (5.8)	204 (4.7)	205 (4.5)	204 (4.1)	203 (6.5)
School Ranking							
Top Third	%	59 (3.6)	38 (3.4)	53 (4.2)	43 (4.0)	80 (2.6)	17 (2.3)
	Prof.	239 (3.0)	238 (3.3)	239 (3.2)	238 (3.5)	239 (2.8)	238 (3.1)
Middle Third	%	58 (2.3)	38 (2.4)	53 (2.9)	41 (2.7)	75 (2.8)	22 (2.3)
	Prof.	220 (2.7)	217 (3.4)	220 (2.2)	217 (4.0)	219 (2.7)	216 (4.7)
Lower Third	%	55 (3.7)	40 (3.4)	46 (3.4)	45 (3.1)	70 (2.9)	22 (2.1)
	Prof.	199 (2.7)	196 (4.3)	194 (3.3)	199 (3.3)	199 (2.7)	188 (3.9)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). Percentages do not total 100 percent due to a 3 to 9 percent nonresponse rate. Nonresponses were the result of students saying "I don't know," providing an inaudible/uncodable response, or not being asked the question.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

More often than not, for each type of discussion activity students reported talking about books they had chosen. According to their responses, fourth-grade students were more apt to discuss what they have read with family or people they live with than with friends or teachers. This finding would seem to support those who have called for a renewed focus on the importance of intergenerational connections in reading and literacy development.[31] From these results, it appears that the family continues to play a predominant role in the development of attitudes and habits related to reading. Over three-fourths (76 percent) of fourth graders spent some time at home talking about their independent reading. However, more female students (81 percent) than male students (70 percent) reported engaging in this activity with family or people with whom they lived. There was also a significantly larger proportion of students from the top-performing schools (80 percent) compared to the lower-third schools (70 percent) who reported that they discussed books they had read with family or people at home.

Sources of Reading Materials

Given that recreational reading is a worthwhile activity for students, it is first necessary that appropriate materials be available and accessible to young readers. Fourth-grade students participating in the IRPR study were asked where they get the books they choose to read on their own. Students were encouraged to identify all the sources from which they had obtained books to read. The most frequently reported sources by students in the study were — home, school, and the public library. Table 1.7 presents the five most frequently reported locations for obtaining self-selected books and the percentages of students who reported obtaining books from those sources.

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[31] Handel, R. D. (1992). The partnership for family reading: Benefits for families and schools. *The Reading Teacher*, 46(2), 116-126.

Table 1.7 — Sources of Independent Reading Material

Percentages of Students Reporting Different Sources of Independent Reading Materials by Gender, Race/Ethnicity, and School Ranking, Grade 4, 1992 NAEP Integrated Reading Performance Record

	SOURCES OF SELF-SELECTED BOOKS				
	School	Public Library	Store	Home	Book Clubs
Nation	32 (2.0)	72 (1.8)	21 (1.2)	35 (2.1)	11 (1.0)
Gender					
Male	35 (2.8)	73 (2.6)	18 (2.2)	37 (3.1)	10 (1.4)
Female	29 (2.2)	72 (2.3)	23 (1.9)	32 (2.2)	12 (1.5)
Race/Ethnicity					
White	32 (2.5)	73 (2.2)	22 (1.7)	35 (2.5)	12 (1.3)
Black	36 (3.8)	72 (3.3)	16 (3.6)	34 (4.4)	3 (1.3)
Hispanic	29 (4.1)	65 (3.9)	17 (3.1)	32 (5.0)	17 (4.5)
School Ranking					
Top Third	26 (3.3)	71 (3.6)	22 (2.9)	35 (3.8)	14 (2.1)
Middle Third	34 (3.2)	75 (3.1)	22 (2.4)	37 (3.6)	12 (1.4)
Lower Third	36 (3.5)	70 (2.6)	17 (1.7)	31 (3.4)	7 (1.5)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

Students' responses to this question indicated that the public library is a major source of self-selected, independent reading books. For the nation, 72 percent of fourth graders said they chose books to read on their own from the library. This finding was consistent across the different subgroups of students and school rankings. This substantial proportion of fourth-grade students reporting the library as a source of independent reading materials supports the position taken by researchers stressing the importance of these facilities to the early literacy development of young children.[32] The next two most frequently cited sources of independent reading material were school and home. Approximately one-third of the students reported obtaining

[32] Morrow L. M., & Weinstein, C. S. (1986). Encouraging voluntary reading: The impact of a literature program on children's use of library centers. *Reading Research Quarterly, 21*(4), 330-346.

books from school and home — 32 percent and 35 percent, respectively. Once again, there appeared to be little variation across the different reporting groups for these two sources.

At least some students actually purchased their own books or had books purchased for them at stores or through mail-order book clubs. Over one-fifth (21 percent) of fourth graders in the nation reported obtaining books from stores and 11 percent said they buy books through book clubs. More White students (12 percent) than Black students (3 percent) indicated that they had acquired reading materials through book clubs. In addition, students from the top- (14 percent) and middle-third schools (12 percent) were more likely than students from the lower-third schools (7 percent) to use book clubs as a source of independent reading materials. These differences in available sources or use of sources in obtaining reading material may be of particular interest to educators concerned about the accessibility of literacy materials for different groups of children.

Summary

The information contained within this chapter shows that much can be learned about students' literacy abilities and practices by asking direct questions in an interview format. The habits and practices described here may reflect the extent of interest students have in literacy activities. Furthermore, they may provide some indication of literacy priorities that have been set at school and at home for young readers. In addition to eliciting information about students' reading behaviors, engaging students in a conversation about these issues may contribute to students' self-awareness about their own literacy interests and behaviors, and may demonstrate for them the importance of such activities to their educational development.

A major finding was that the majority of fourth-grade students reported reading books and other materials, both in school and out of school. Although they were not read as often as storybooks, magazines and information books were being read by more than three-fourths of these students. The fact that 20 percent more fourth graders indicated reading storybooks than information books may have some relationship with findings from the main NAEP reading assessment. The 1992 NAEP reading assessment measured students' abilities in reading for literary experience and reading to gain information. (Reading to perform a task was also assessed at grades 8 and 12.) In that assessment, fourth-grade results

indicated significantly higher proficiency for the literary purpose than for the informative purpose. This pattern was not consistent across the grades, however, which suggests some developmental changes in reading proficiency.[33] It is possible that fourth-graders' relative success with reading for literary experience may be related to their greater exposure to these types of materials. This emphasis on storybooks and literary experiences at grade 4, as compared to more utilitarian reading activities, has been attributed to both curricular patterns and developmental traits.[34]

Another important finding that emerges from these data is the significance of the home environment in the lives of developing readers. Fourth graders were more likely to read a variety of materials in their homes than at school or in the library. In addition, they were more likely to discuss their reading with family or people they live with than with teachers or friends. Clearly, much of students' formative literacy experiences take place in the home or with family members. This information suggests the continued importance of intergenerational literacy connections.

In viewing reading as a constructive process, responses to reading become especially important since they provide opportunities to extend textual understandings and reactions. Encouragingly, the majority of students in this study indicated pursuing some type of written response to reading as well as engaging in discussions about what they read. Those students who reported writing book reports or "anything else" about what they had read had higher average reading proficiencies than students who had not reported the same activities. Also, significantly more students from the top-third performing schools reported having written book reports than students from the lower-third performing schools.

The importance of exposure to diverse reading materials points to another critical issue that was addressed in this chapter — sources of reading materials for students. The importance of libraries as a primary source for independent reading materials was striking based on students' reports in this study. Nearly three-fourths of the students indicated libraries as a source of self-selected books, while school or home sources were reported by approximately one-third of the students. No other source indicated by these students came close to being as prominent as the library.

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[33] Langer, J. A., Campbell, J. R., Neuman, S. B., Mullis, I. V. S., & Persky, H. R. (in press). *Reading Assessment Redesigned: Authentic Texts and Innovative Instruments in NAEP's 1992 Survey.* National Center for Education Statistics, Washington, DC: Government Printing Office.

[34] Newkirk, T. (1989). *More than stories: The range of children's writings.* Portsmouth, NH: Heinemann.

Egan, K. (1988). *Primary understanding: Education in early childhood.* New York: Rutledge.

2

Fourth-Graders' Classroom Work in Reading

A major focus of the IRPR was to gather sample school work. The 1992 NAEP reading assessment was planned in the context of emerging changes in reading assessment, including the increasing use of portfolios for classroom assessment. When the 1992 assessment was being framed by the reading planning committee, portfolio approaches had not been actually applied in a large-scale assessment. However, the committee believed that it was important to explore this approach to assessment, if possible, as part of the 1992 assessment. It was agreed that a special study would include the use of components such as those used in portfolio assessment.[35]

Over the last several years, the use of portfolio assessment as a tool for documenting the growth of students' literacy abilities has moved out of the

[35] *Reading Framework for the 1992 and 1994 National Assessment of Educational Progress.* National Assessment Governing Board. Washington, DC. Government Printing Office.

laboratory and into the classroom for many schools.[36] More and more, teachers, parents, and school districts are recognizing the value of evaluating students' progress through collected samples over extended periods of time. As an assessment method, portfolios allow for a more complete picture of how students are developing by documenting their growth, rather than providing only a "snapshot" of what they can do at a particular moment in time.[37] Furthermore, portfolio assessment techniques often include opportunities for student reflection on, and self-evaluation of, their own accomplishments.[38]

Still, the use of portfolios as a part of large-scale assessments continues to be somewhat limited and the challenges of such innovative assessment techniques in large-scale projects are numerous. However, the 1990 and 1992 NAEP assessments of writing included this approach for collecting and evaluating classroom writing samples.[39] For both assessments, teachers were notified and asked to help sampled students select work that was typical of the writing assignments completed during classroom instruction. The results of both special studies in writing demonstrated that many teachers of fourth- and eighth-grade students across the country are implementing process writing instructional approaches and are familiar with the concept of portfolio and portfolio-like methods of assessment.

Students who participated in the 1992 IRPR were asked to bring three samples of work they had done as a part of reading instruction in their classroom.

This was a first attempt at collecting and describing the typical classroom work students were completing across the country in reading

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[36] Hansen, J. (1994). Literacy portfolios: Windows on potential. In S. W. Valencia, E. H. Hiebert, and P. P. Afflerbach (Eds.), *Authentic Reading Assessment: Practices and Possibilities*. Newark DE: International Reading Association.

Calfee, R. C., & Perfumo, P. (1993). Student portfolios: Opportunities for a revolution in assessment. *Journal of Reading, 36*(7), 532-537.

[37] Tierney, R., Carter, M., & Desai, L. (1991). *Portfolio assessment in the reading-writing classroom*. Norwood, MA: Christopher-Gordon.

[38] Hansen, J. (1992, May). Literacy portfolios: Helping students know themselves. *Educational Leadership*, 66-68.

Hebert, E. A. (1992, May). Portfolios invite reflection from students and staff. *Educational Leadership*, 58-61.

[39] Gentile, C., Martin-Rehrmann, J., & Kennedy, J. H. (in press). *Windows Into the Classroom: NAEP's 1992 Student Writing Portfolio*.

Gentile, C. (1992). *Exploring new methods for collecting students' school-based writing: NAEP's 1990 portfolio study*. National Center for Education Statistics. Washington, DC: Government Printing Office.

and an investigation to determine if this portfolio-like technique would be feasible for a national reading assessment. Teachers of potential participants were informed several weeks prior to the IRPR administration that some students in their classrooms would be interviewed for the IRPR and would be asked to bring three samples of classroom work. It was emphasized that this work was to be representative of typical instructional activities and that no special preparation or projects were required.

One or two days prior to the actual interview, the selected students and their teachers were notified and asked to choose three pieces of classroom work in reading that could be collected during the interview. Students and teachers were offered the option of providing copies of students' work so they could retain the originals. During the interview, students were given the opportunity to describe the work and were asked several questions about their experience in completing the work. The interviewers took the samples, or copies of samples, for subsequent classification. These samples, along with students' responses to questions about their work, were used not only to explore new approaches to assessment, but also to provide a window into classrooms across the country — a window with a perspective slightly different from, but complementary to, the one provided through the background and instructional questionnaires that have traditionally been a part of NAEP and other large-scale assessments.

Describing Samples of Students' Classroom Work

A wide array of instructional activities was represented in the classroom work samples students brought to the interview. In order to describe the different types of work and to provide a more meaningful context for examining students' discussions of their work, students' work samples were categorized into seven general types of classroom work: commercially prepared extended writing tasks, commercially prepared short writing tasks, commercially prepared skills-oriented activities, noncommercially prepared extended writing tasks, noncommercially prepared short writing tasks, noncommercially prepared skills-oriented activities, and projects or crafts. The distinction between commercial and noncommercial sample work was made to explore the extent of student- or teacher-generated tasks that characterize fourth-grade reading instruction and how their use may differ from work associated with published instructional programs. These different classifications are described below.

Commercial and noncommercial extended writing

Papers that included a paragraph or more of students' own writing were considered extended writing. This criterion was consistent with the definition of extended response tasks in the main portion of the NAEP reading assessment. Those writing samples that were apparently in response to some commercial prompt or had been written on paper that appeared to come from a published instructional program were deemed commercial extended writing tasks. Those papers that provided no evidence of a published instructional program were considered noncommercial extended writing.

Commercial and noncommercial short writing

Short writing was defined as anything from two or three words to no more than a couple of sentences of writing. If the task required only one word responses, such as the traditional fill-in-the-blank activity, it was not considered to be short writing; it was placed in another category — skills-oriented activity. There had to be some evidence of constructing a response to convey an idea in order for a particular activity to be classified as short writing. If the writing involved at least three sentences that were combined in discussing a single topic, the work was classified as extended writing. As with the extended writing tasks, evidence of being part of a published instructional program or activity resulted in it being classified as commercial.

Commercial and noncommercial skills-oriented activities

Those activities that appeared to be requiring isolated or decontextualized skills and that involved little or no writing beyond one-word responses were described as skill-oriented activities. Similar to previous classifications, a distinction was made between commercial and noncommercial materials.

Projects or crafts

A small number of students brought samples of work that could not be classified into any of the other categories and yet had been completed as a part of reading instruction. Some of these involved drawings, paper constructions, or some other mode of expressing ideas beside paper-and-pencil activities. Many of these could be classified as "projects or crafts."

While some range in representation of the various types of classroom work was evident, the following examples of each type of work (excluding projects or crafts) in Figures 2.1 - 2.6 are characteristic of the work samples in each category.

Figure 2.1

Commercial Extended Writing Sample

3 10/29/91

INDEPENDENT WRITING

A Direction Paragraph (27) NAME

Prewriting Suppose that you are going away for the weekend and that a friend is going to take care of your pet. You are going to leave a note to tell your friend what to do. Think about all the things you do when you take care of your pet. Jot down notes. Look over your notes to make sure the steps are in a reasonable order. Renumber the steps if you need to.

Writing Write your paragraph that tells your friend exactly what to do. Start your paragraph with a main-idea sentence. Then write detail sentences that tell what to do in the exact order.

Dear Carlina.

Could you plase take my five dogs to your house. First you give them a walk. Next you give them food. Then you gave them a verry good bath. Finaly you put the dogs to bed & play with the dogs.

Your friend,

Editing Use these editing symbols to edit your paragraph.

Editing Symbols	
¶ indent	≡ capitalize
∧ add	⸗ take out

Figure 2.2

Noncommercial Extended Writing Sample

1/17/91

1. The title of the book is "Number the Stors." It's about Ten-year-old Annemarie Johansen and her best friend Ellen Rosen often think abart the life before the war. But it's 1943 and their life in Copenhagen is full of school, food storages and Nazis in their town. The Nazis try to get the Jews out Copenhagen and Denmark. Ellen moves in with the Johansens and pretends to be in the family. Annemarie has to save her best friend. The Jews get to Sweden on boat by hiding in a secret place. The author close this Dame because Ellen has a necklace and on its the star of David which shows shes a Jew. When she moves away Annamarie gets it.

BEST COPY AVAILABLE

Figure 2.3

Commercial Short Writing Sample

#3

90 -1

Write a complete sentence to answer each question.

1. How long had Hector been inside the egg? Twenty one days inside a egg.
2. Why couldn't Hector kick his way out of the egg? Beasuse he couldn't move his legs.
3. What did Hector use as a tool to break the shell? his tooth.
4. When had Hector's tooth formed? on the tenty days
5. What did Hector do each time he got tired? hit his tooth on the shell.
6. What happened to the crack each time Hector pushed his tooth against it? it cracked
7. What did Hector do when he got out of the egg? Took a neff.
8. How did Hector's feathers look when he got out of the egg? wet.
9. Why do you think it was very important for Hector to get out of the egg? he could be dryed.

Objective: Demonstrate an understanding of a selection (Comprehension/Literary Skills)

101

Figure 2.4

Noncommercial Short Writing Sample

Readings 11-19-97

1 It was very ~~old~~ this winter.

2 Sue was so ~~angry~~ she yelled.

3 He tried to ~~repair~~ the broken clock.

4 The test was so ~~easy~~ that I finished first.

5 Jay is too ~~short~~ to reach the shelf.

Figure 2.5

Commercial Skills-Oriented Activity Sample

Base Words

Name Date

Find the base word of each key word below. Circle the letter of the base word.

1. nonsense
   a. on
   b. sense
   c. none

2. movement
   a. veme
   b. ment
   c. move

3. powerless
   a. were
   b. power
   c. less

4. trunkful
   a. trunk
   b. run
   c. ful

5. replace
   a. place
   b. rep
   c. lace

6. driver
   a. rive
   b. drive
   c. river

7. retirement
   a. retire
   b. tire
   c. ire

8. singable
   a. sin
   b. able
   c. sing

9. penniless
   a. less
   b. penny
   c. pen

10. displease
    a. please
    b. ease
    c. dis

11. breakable
    a. able
    b. reak
    c. break

12. action
    a. tion
    b. act
    c. ion

13. dishonest
    a. honest
    b. dish
    c. nest

14. zigzagged
    a. zig
    b. zag
    c. zigzag

15. ceasing
    a. sing
    b. cease
    c. ease

16. noisily
    a. ly
    b. noisi
    c. noise

17. excitement
    a. excite
    b. ment
    c. cite

18. richly
    a. ich
    b. rich
    c. ly

19. successful
    a. ful
    b. cess
    c. success

20. regather
    a. gather
    b. the
    c. gath

21. settlement
    a. ment
    b. leme
    c. settle

22. towering
    a. owe
    b. tower
    c. tow

23. yearly
    a. early
    b. ear
    c. year

24. listed
    a. list
    b. sted
    c. ist

Figure 2.6

Noncommercial Skills-Oriented Activity Sample

A very interesting picture of reading instruction in this country emerges from the samples of classroom work that were collected. Because students and teachers were allowed to select samples based solely on the criterion that they be examples of typical classroom work, the work collected may not be strictly representative of all the written work completed in this country as part of fourth-grade reading instruction. However, since the IRPR sample of students was a nationally representative one, we are at least able to gain a glimpse of the daily work students are given in their classrooms to promote their reading development. We can observe what fourth-grade students in this country and their teachers view as typical classroom work in reading and what students have to say about that work.

Each student was asked to bring three samples of typical reading classroom work to the IRPR interview. As shown in Table 2.1, all but approximately 14 percent of students brought at least three samples, 3 percent brought one example, and 8 percent brought two examples. In the event that students brought more than three samples, the interviewer asked the student to select three samples from among the ones the student had brought that would be most like the typical work done during reading instruction. Only the three selected were included in the analysis.

Table 2.1 — Number of Work Samples

Percentages of Students and the Number of Work Samples They Brought to the IRPR Interview, Grade 4 1992 IRPR

No Samples	One Sample	Two Samples	Three Samples	More Than Three Samples
3 (0.7)	3 (0.7)	8 (1.6)	68 (2.1)	19 (1.3)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages less than 0.5 percent were rounded to 0 percent. Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Integrated Reading Performance Record

A total of 3,121 different work samples were presented by the students participating in the IRPR special study. Classifying students' sample work took place after the interviews were conducted and all the samples had been collected. The categorization of work samples into one of the seven classifications was completed by a group of trained examiners. Table 2.2 presents the percentages of students who brought at least one sample of each type of work. Each student was only counted once for each type of work he or she brought to the interview, even though students may have brought three samples of the same type. When each type of work presented by students was counted only once, the total number of work samples used in these analyses was 1,993.

It is notable that the largest percentage of students presented noncommercial extended writing activities. Since students were told to bring work that was typical of their classroom work in reading, this suggests that many fourth-grade students are engaged in extended writing during reading instruction. These data parallel results from other recent NAEP reports that suggest an increased instructional emphasis is being placed on what could be considered constructive and integrative activities, such as combining reading and writing.[40] This may indicate that many teachers or curriculum programs have embraced a more cognitive, process-oriented approach to reading instruction.

Short writing activities — commercial and noncommercial — were presented by 23 and 34 percent of the students, respectively. While these activities involved much less writing and gave few if any opportunities to fully develop ideas or interpretations about what was read, they did at least require students to construct responses.

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[40] Mullis, I. V. S., Campbell, J. R., & Farstrup, A. E., (1993). *The 1992 National Reading Report Card.* National Center for Education Statistics. Washington DC: Government Printing Office.

Table 2.2 — Samples of Classroom Work

Percentages of Students Who Brought At Least One Sample of Each Type of Work, Grade 4, 1992 Integrated Reading Performance Record

Type of Work	Percentage of Students Presenting At Least One Sample
Commercially Prepared Extended Writing	6 (0.7)
Noncommercially Prepared Extended Writing	52 (1.5)
Commercially Prepared Short Writing	23 (1.0)
Noncommercially Prepared Short Writing	34 (1.1)
Commercially Prepared Skills-Oriented	38 (1.3)
Noncommercially Prepared Skills-Oriented	17 (0.7)
Projects or Crafts	4 (0.5)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference for paired samples.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

Commercially prepared writing and skills-oriented activities were presented by 6 to 38 percent of the students. Seventeen to 52 percent of the students presented noncommercially prepared activities. Apparently teachers are not relying solely on commercially prepared instructional activities to teach reading to their fourth-grade students. The work samples that were classified as noncommercially prepared displayed no evidence of pre-set constraints or limitations on students' responses. Although the work presented by students was a self-selected sample, this may be an indication that typical fourth-grade reading instruction is no longer a series of commercially prepared workbook or work sheet activities. Traditionally, many of these exercises focused on decontextualized skill development, and thus, were not viewed as supportive of complex, integrative abilities.[41]

[41] Osborne, J. (1986). The ubiquitous workbook: Cause for concern? *American Educator: The Professional Journal of the American Federation of Teachers, 10*(2), 24-29.

When portfolio assessment is pursued as a documentation of students' educational progress in the classroom, it is usually accompanied by student reflection and self-evaluation. This process of self-evaluation is considered to be one of the most beneficial aspects of using portfolios. Students learn how to appraise the adequacy of their own work and how to evaluate what they have learned. Researchers believe that in the process, students may come to value their own efforts and progress in achieving desired goals.[42]

Fourth graders participating in the IRPR were given the opportunity to discuss some of their impressions about the work they presented during the interview. Their responses to questions about their work served to further illustrate classroom practice and students' perceptions of reading instruction. Students were asked the following questions about their work:

Who decided which papers to bring?

This question was asked to determine whether the student, the teacher, or some other person made the decision, or had input in making the decision, of what work samples to bring to the IRPR interview.

How often do you do this work?

By determining the frequency with which students reported completing the particular type of work they presented, it was possible to get an indication of how typical that type of work may actually be in students' classrooms.

How do you know if you did a good job?

The purpose of this question was to determine the extent to which students depend on external or internal sources of evaluation for judging the quality of their work.

What do you learn from doing this kind of work?

This question was intended to reveal the nature of students' understanding about their own classroom work. Responses were rated for evidence of students' focus on the skill being taught or reinforced, their focus on the

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[42] Miller, S. D., Adkins, T., & Hooper, M. L. (1993). Why teachers select specific literacy assignments and students' reactions to them. *Journal of Reading Behavior, 25*(1), 69-95.

Burnett, E. H., & Berg, P. C. (1988). Reading instruction in the schools: Improving students' critical thinking skills. *Reading Instruction, 61*, 208-210.

mechanics of the task (i.e., how to complete the task), or their focus on the content of the task, not related to its apparent instructional intent.

Decision Process for Selecting Work Samples

How students went about selecting work samples to bring to the IRPR interview is indicated in Table 2.3.

Table 2.3 — Who Selected Work Samples

Percentages of Students Indicating Who Was Responsible for Deciding Which Work Samples to Bring to the IPRP Interview, Grade 4, 1992 Integrated Reading Performance Record

		"WHO DECIDED WHICH PAPERS TO BRING?"			
		Teacher	Student	Teacher and Student	Other
Nation	%	52 (2.3)	14 (1.6)	7 (1.1)	11 (1.7)
	Prof.	217 (2.1)	229 (3.7)	225 (4.2)	218 (3.8)
Gender					
Male	%	52 (2.8)	14 (1.8)	7 (1.4)	10 (1.7)
	Prof.	212 (2.6)	225 (5.3)	218 (6.3)	214 (5.9)
Female	%	53 (2.8)	14 (2.0)	8 (1.4)	12 (2.2)
	Prof.	222 (3.0)	233 (4.1)	231 (5.7)	222 (6.0)
Race/Ethnicity					
White	%	51 (2.4)	15 (2.1)	7 (1.3)	11 (2.0)
	Prof.	225 (2.7)	234 (4.5)	232 (4.3)	224 (4.2)
Black	%	60 (4.8)	8 (2.2)	8 (2.9)	8 (2.4)
	Prof.	197 (4.1)	215 (11.4)	209 (9.4)	196 (7.6)
Hispanic	%	48 (4.4)	18 (3.4)	5 (1.2)	10 (3.6)
	Prof.	200 (4.1)	214 (6.5)	213(16.2)	194(12.1)
School Ranking					
Top Third	%	44 (4.0)	22 (3.4)	7 (1.9)	9 (2.3)
	Prof.	240 (3.3)	238 (4.6)	245 (5.8)	236 (6.0)
Middle Third	%	55 (2.8)	11 (1.7)	7 (1.8)	13 (2.6)
	Prof.	217 (3.1)	230 (6.0)	222 (5.4)	215 (5.4)
Lower Third	%	58 (3.9)	9 (1.6)	8 (1.9)	9 (2.0)
	Prof.	197 (2.2)	204 (5.0)	206 (4.7)	203 (6.6)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). Percentages do not total 100 percent due to 3 percent of students not bringing work samples and 10 to 13 percent nonresponses. Nonresponses were the result of students responding "I don't know," providing an inaudible/noncodable response, or not being asked the question.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

More than half of the students (52 percent) indicated that only their teacher had input in the decision about which work samples to bring to the interview. Students said that they decided 14 percent of the time and that they decided with their teacher 7 percent of the time. Another 11 percent gave other sources of the decision. If the task of having to decide which work samples to take to an interview is considered to be somewhat indicative of classroom interaction patterns surrounding work evaluation and selection, then it would seem that teachers may have the most input in these decisions.

These data also provide information about the relationship between decisions regarding work samples and students' overall reading proficiency. For the nation, those students who reported that they had sole input in the decision about what to bring to the interview also had significantly higher average reading proficiency (229) than students who reported that it was their teachers alone who made the decision (217). In addition, a greater percentage of students from the top-third schools (22 percent) reported that they made work sample decisions on their own, compared with students from middle-third (11 percent) or lower-third schools (9 percent). Among students in the top-third schools, however, no significant proficiency differences were observed based on how work samples were selected.

From these data alone, it is unclear whether teachers were more likely to allow their proficient readers a greater level of independence in making decisions about work samples or if allowing students to make these decisions on their own was reflective of an ongoing classroom interaction pattern that consistently supported student initiative and may have positively influenced students' achievement. Some research has, in fact, indicated that when students are given increased opportunities to exercise a certain amount of control in their educational pursuits they are likely to excel in both motivation and achievement.[43]

Frequency of Completing Different Types of Classroom Work in Reading

For each type of work presented during the IRPR interview, students were asked how often they completed that type of work in their classroom as a part of reading instruction. Since many students brought more than one

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[43] Oldfather, P. (1993). What students say about motivating experiences in a whole language classroom. *The Reading Teacher*, 46(8), 672-681.

Greene, J. C. (1982). *Conceptual Study of Students' Sense of Efficacy*. (NIE-G-80-0074). National Institute of Education. Washington, DC.

sample of a particular type of work, only information about their first sample of that type of work was included in the following analyses. Therefore, the data include only one response from each student for each type of work that the student presented. For example, if a student brought three commercial extended writing tasks to the IRPR interview, his or her answers to questions about the first one of these discussed during the interview are presented here. If a student brought two examples of one type of work and one example of another type, his or her responses to the first sample of the two similar ones would be included in the analysis, along with his or her responses about the single sample. Of course, if a student brought samples of three different types of work, then that student's responses for each sample were included in the analysis. Students' responses to questions about their commercial extended writing tasks and projects or crafts are not presented in the following tables due to the small number of students who brought samples of these types of work to the interview. The sample size for these two types of activities was not sufficient to permit reliable estimates.

The overall percentages of students reporting the frequency with which they complete five types of activities in their classrooms are presented in Table 2.4.

Table 2.4 — Frequency of Instructional Activities

Frequency with which Students Reported Completing the Different Types of Work as a Part of Their Reading Instruction, Grade 4, 1992 Integrated Reading Performance Record

Type of Work	Number of Students Responding with Type of Work	"HOW OFTEN DO YOU DO WORK LIKE THIS?" More than once a week	Once a week	A few times a month	Once a month	Less than once a month
Noncommercial Extended Writing	N = 470	29 (2.6)	26 (2.6)	12 (1.8)	20 (2.9)	14 (2.2)
Commercial Short Writing	N = 240	46 (3.8)	39 (4.2)	4 (1.5)	8 (2.5)	3 (1.3)
Noncommercial Short Writing	N = 325	30 (3.0)	41 (2.8)	7 (1.6)	11 (2.2)	10 (1.8)
Commercial Skills Oriented Activity	N = 349	45 (3.0)	37 (3.0)	6 (1.4)	7 (1.7)	4 (1.0)
Noncommercial Skills Oriented Activity	N = 165	35 (4.2)	41 (3.8)	9 (2.5)	6 (2.6)	10 (1.9)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

For the most part, these data indicate that a wide array of activities is being used at least weekly as a part of fourth-graders' reading instruction. There appeared to be few differences between the various types of work; however, commercially prepared skills-oriented and short writing tasks were more likely than the other types of work to be used more than once a week (not statistically different from noncommercial skills-oriented activities). In general, students' responses tended to indicate that teachers were using a variety of activities since nearly a third or more (29 percent to 46 percent) of students reported doing work similar to what they brought to the interview more than once a week for each of the five activities with reported data.

Once again, this information would appear to support findings from the *1992 NAEP Reading Report Card*[44] as well as other findings from this special study suggesting that many students are asked somewhat frequently to write as a part of reading instruction. However, as reported in the *1992 NAEP Reading Report Card*, fourth graders across the country reported more frequent use of commercial skills-oriented activities, such as workbook pages or worksheets, than extended writing activities as a part of reading instruction. The IRPR data would seem to suggest the same pattern: nearly one-half (45 percent) reported commercial skills-oriented activities more than once a week, while less than one-third (29 percent) indicated the same frequency for extended writing.

Fourth-Graders' Criteria for Evaluating Their Own Classroom Work

Students' ideas about how they know they have accomplished desired goals or have been successful at particular activities may play a key role in their development into self-initiated learners. Some educators and researchers have suggested that students who depend solely on their teacher or some other external source for evaluating their own work may not be cultivating the kind of internal standard for performance that is necessary for students to develop into independent, critical thinkers and learners.[45]

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[44] Mullis, I. V. S., Campbell, J. R., & Farstrup, A. E., (1993). *NAEP 1992 Reading Report Card for the Nation and the States*. National Center for Education Statistics. Washington, DC: Government Printing Office.

[45] Ames, C. (1990, April). *The relationship of achievement goals to student motivation in classroom settings*. Paper presented at the Annual Meeting of the American Educational Research Association, Boston.

Stipek, D. J., & Weisz, J. R. (1981). Perceived personal control and academic achievement. *Review of Educational Research, 51*, 101-137.

As a part of the IRPR interview about each work sample, students were asked, "How do you know if you did a good job?" Their responses were classified as indicating predominately an *external* source of evaluation (e.g., the teacher gives a grade), an *internal* source (e.g., students make their own determination based on their own expectations), or indicating that students did not know how to determine the quality of their work. The percentages of students indicating either external or internal sources of evaluation, or "I don't know," for each of five different types of work are presented in Table 2.5.

Table 2.5 — Sources of Self-Evaluation

Percentages of Students Reporting Different Sources of Evaluating Their Own Classroom Work in Reading, Grade 4, 1992 Integrated Reading Performance Record

		SOURCE OF EVALUATION: "HOW DO YOU KNOW IF YOU DID A GOOD JOB?"					
		EXTERNAL		INTERNAL		"I DON'T KNOW"	
Type of Work	Number of Students Responding with Type of Work	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
Noncommercial Extended Writing	N = 573	67 (2.4)	226 (3.4)	16 (2.0)	218 (4.0)	17 (2.3)	213 (2.7)
Commercial Short Writing	N = 252	74 (2.5)	222 (4.3)	18 (2.3)	222 (4.5)	8 (1.7)	198 (8.0)
Noncommercial Short Writing	N = 366	71 (2.4)	221 (3.3)	16 (1.9)	216 (4.7)	13 (2.0)	214 (7.4)
Commercial Skills Oriented Activity	N = 420	75 (2.6)	220 (2.5)	18 (1.9)	215 (4.9)	7 (1.8)	218 (9.5)
Noncommercial Skills Oriented Activity	N = 189	70 (3.5)	223 (4.8)	17 (3.1)	222 (6.8)	13 (2.6)	212 (6.3)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details). Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Reading Assessment, Integrated Reading Performance Record

Fourth-graders' responses indicated that most students, regardless of the type of activity, relied on external criteria (67 to 75 percent). Examples of criteria that were coded as predominately extern : criteria included the following actual student responses to the question "How do you know if you did a good job?"

"I look at the grade."

"I don't. All I do is write it down. Sometimes, she'll take it and check it, to see if it's a good job and she'll give us a star if it's good. She'll give us a sad face if she doesn't like it. That's usually how I know that I did a good job, otherwise, I don't."

"Usually, our teacher checks them and if you did a good job she just puts them in our work that we're going to take home, and if we didn't do a very good job, she circles them and you have to check them and fix them."

One student even mentioned relying on family members for feedback:

"If I read it at my house, I read it to some people at my house, and I read it to them, and they say it is good."

In many instances like the ones above, students not only relied on external evaluation for determining the quality of their work but they also did not seem to have clear notions of the criteria being used by others to judge their work.

Only 16 to 18 percent of the students indicated drawing on internal criteria for evaluating their work, such as the following:

"Usually, I read back over and if I read back over, I can usually see a mistake instead of, when I'm writing down. I'm pretty quick, so I can't see what the mistakes are, and if I read back over, I find them."

"I know when I have done a good job, because I tried my best."

"I know by using my head. Look in the story and seeing if they're right or just go back over it, if it wasn't a story."

Seven to 17 percent of the students indicated that they didn't know how to determine if they did a good job or their responses indicated an extremely vague sense of evaluative criteria. Such responses included the following:

"I don't, I just wait and see."

There was not a clear connection between students' means of judging their work and the type of work they were presenting. Across all types of

work students relied mainly on external criteria for determining their success in completing tasks. There appeared to be little relationship between sources of evaluation and students' overall proficiency across most of the types of work. However, students who reported not knowing how they did a good job with noncommercial extended writing and commercial short writing tasks had lower average proficiencies than students who provided external criteria for these activities. Perhaps one reason why more significant relationships were not observed between sources of evaluation and proficiency is that students may not always rely on only one source, but may draw on both internal and external criteria at different times.

Students' Understanding of What They Learn as They Complete Their Classroom Work

Perhaps one of the most important ways to determine the extent to which students are engaged in the learning process is to ask them about their understanding of the purpose for their classroom activities. Several researchers have looked at this aspect of learning and have established the awareness of instructional purpose and learning goals as important elements in learning.[46]

Students participating in the IRPR special study were asked what they learned from doing the different types of work they presented during the IRPR interview. Responses were grouped into four categories. The first category, *how to do the task*, was used to describe responses that indicated students were focusing on the mechanics of the task, not necessarily the instructional intent of the activity. These types of responses included the following:

> *"I learn that just take your time with the words and don't hurry up with the words."*
>
> *"You read the story and you answer the questions. It's like you try to read without looking back, and try not to have anybody help you with it."*

Responses in the second category were those that focused on the *content* of the activity. It was not clear with these responses that students understood the instructional intent or skill being addressed. For example:

> *"About being a president."*

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[46] Schunk, D. H., & Rice, J. M. (1991). Learning goals and progress feedback during reading comprehension instruction. *Journal of Reading Behavior*, 23(3), 351-364.

"What the background was and what happened to the dog."

"I just learn neat stuff about the dinosaurs, that I didn't know before."

Other students were able to identify the *skill* they were learning or practicing, such as finding the main idea or dividing words into syllables. These responses seemed to indicate that students were aware of what they were supposed to be learning or practicing as they completed the activity. The following responses were characteristic of this type:

"We learn how to be creative with our writing."

"How to write in cursive, how to spell stuff."

"Topic, main idea, supporting details."

A few students reported that they did not know what they learned by doing certain activities or their responses were so vague that it seemed they had little or no idea what they might be learning. This type of response included the following:

"I learn how to do reading."

"It's fun."

The percentages of students' responses falling into the different categories by type of classroom work are presented in Table 2.6. Generally, the most frequent response from students about their work samples indicated that they were aware of the skill or ability that was intended to be learned as they completed their work. From 49 percent to 64 percent of the students were able to identify a skill or an ability that they were supposed to be learning or practicing as they completed their respective activities. There were no significant differences between reading proficiency of students by work type and evidence of understanding instructional goals.

Table 2.6 — Awareness of What Is Learned from Classroom Work

Percentages of Students' Responses About What They Are Learning From Doing Their Work by Type of Classroom Work, Grade 4, 1992 Integrated Reading Performance Record

		"WHAT DO YOU LEARN FROM DOING THIS TYPE OF WORK?"							
		HOW TO DO THE ACTIVITY		CONTENT OF THE ACTIVITY		SKILL BEING TAUGHT OR REINFORCED		I DON'T KNOW	
Type of Work	Number of Students Responding with Type of Work	% of Students	Average Prof.	% of Students	Average Prof.	% of Students	Average Prof.	% of Students	Average Prof.
Noncommercial Extended Writing	N = 453	12 (1.8)	229 (4.7)	24 (2.1)	220 (5.5)	57 (2.6)	228 (3.2)	7 (1.4)	216 (4.3)
Commercial Short Writing	N = 192	11 (2.5)	211 (8.8)	32 (3.4)	216 (5.6)	49 (4.8)	228 (3.9)	8 (3.6)	214 (9.4)
Noncommercial Short Writing	N = 284	14 (2.3)	229 (6.4)	25 (3.6)	219 (6.1)	56 (4.2)	224 (3.2)	4 (1.4)	218 (8.1)
Commercial Skills Oriented Activity	N = 349	11 (1.1)	213 (6.3)	18 (2.4)	220 (5.4)	64 (2.9)	224 (3.1)	8 (1.5)	210 (8.1)
Noncommercial Skills Oriented Activity	N = 155	11 (2.8)	200 (7.6)	24 (4.1)	234 (5.3)	60 (4.1)	224 (4.7)	4 (1.9)	203(20.8)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference (see Appendix B for details).

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Integrated Reading Performance Record

Summary

Collecting work samples and talking with students about these artifacts of literacy development in the context of a large-scale assessment provides a focused image of what classroom reading instruction may be like for fourth graders. According to anecdotal information provided by IRPR administrators, the students who participated in the IRPR special study were typically very enthusiastic about talking with an adult about their school work. For these students, it was an opportunity to describe the importance of their classroom efforts and to explain the purpose behind their activities.

From the work students brought and their responses to questions about their work, it appears that, while many students are engaged in complex, challenging activities in their classes, significant numbers are spending

much of their time engaged in activities that emphasize skill development with little or no writing required. For example, 45 percent of the students indicated that they completed commercially prepared skills-oriented activities more than once a week, while only 29 percent reported the same frequency for noncommercial extended writing activities. Perhaps fourth-grade teachers are beginning to incorporate complex writing tasks in their repertoire of literacy activities, but continue to utilize skill development exercises as well.

The nature of extended writing tasks may vary greatly. Some writing tasks that require students to develop a creative response to something that was read, may help them to gain insight into how writers compose text — an important aspect of proficient readers' prior knowledge. Other types of extended writing activities in reading instruction involve simply reporting on or summarizing the major elements of a piece. These may take the form of book reports — a type of writing activity with which students indicated they are quite familiar (see Chapter 1). Whatever the form of the activity, extended writing can provide students with practice in thinking about what was read and constructing their own ideas about it. By putting together their own thoughts to express a reaction or expand on an idea, readers construct meaning from text.[47]

There were some indications from these data that students who were more involved in their work — having more input in and awareness of the nature of their work — had higher overall reading proficiencies. For example, students who indicated that they were solely responsible for selecting work samples to bring to the interview demonstrated higher average proficiency than students who indicated that the decision had been left up to their teachers. Also, students who had some idea how to determine if they had done a good job or not on two of the different types of classroom work had higher average proficiencies than students who responded "I don't know." While they can not be considered conclusive, these results may provide some support for recommendations from educators and researchers that students should be engaged, self-aware, and concerned with their own learning and learning activities.[48]

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[47] Spivey, N. N., & King, J. R. (1994). Readers as writers composing from sources. In R. R. Ruddell, M. R. Ruddell, & H. Singer (Eds.). *Theoretical Models and Processes of Reading*. Newark, DE: International Reading Association, 668-694.

[48] Corno, L., & Kanfer, R. (1993). The role of volition in learning and performance. In L. Darling-Hammand (Ed.) *Review of Research in Education*. Washington, DC: American Educational Research Association.

Schunk, D. H., & Rice, J. M. (1991). Learning goals and progress feedback during reading comprehension instruction. *Journal of Reading Behavior*, 23(3), 351-364

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A Window Into Students' Literacy Development

As research provides more detail about the literacy practices and attitudes that characterize students' development into lifelong readers, it is possible to take a more informed look at the instructional approaches and activities that can best support those desired attributes. The 1992 IRPR has provided yet another window through which we may peer into the classrooms of fourth graders and find out what students are doing that may be associated with higher achievement in reading. In addition, it has provided more in-depth information about students' reading practices outside of school and how those practices relate to students' overall success in reading.

Diverse Reading Experiences

One major implication that seems apparent from the results of this study is the importance of students' exposure to various types of reading. Students

in the IRPR were asked about their experiences with three major types of reading materials — magazines, storybooks, and information books. Approximately one-third of the students indicated that they had not read at least one of these major types. Their average proficiency in reading was significantly lower than that of students who indicated that they did have experience with all three types. While the argument could be made that students with more advanced reading abilities might be more inclined to read a broader scope of materials, this hardly seems adequate justification for not giving all students an opportunity to read as many kinds of texts as possible. With increasing emphasis being placed on standards for students' learning opportunities, exposure to various types of reading materials may be one area that should receive attention.

The need for increasing students' opportunities at school to read different types of materials is evidenced by indications of where they actually do their reading. Student responses made it clear that most often they read in their own homes. It was less apparent that students were doing significant amounts of reading at school. While over one-half of the fourth graders reported reading storybooks at school, the proportion of students also reading information books and magazines at school was significantly lower. Only about one-third reported reading information books in their schools and less than one-fifth said the same about magazines.

The fact that nearly two-thirds of fourth graders did not report reading information books at school may signal a need to increase students' reading opportunities with this type of material. A positive relationship between reading information books and average reading proficiency was indicated in the data. A similar pattern was seen in the differences between students attending the top- and the lower-third performing schools — students in the top-third schools were more likely to report having experience with information books. It is quite possible that funding and availability of resources are an important aspect of these differences. These results may support the arguments made by some reading experts that early reading experiences should not be limited to narratives and stories, as is often the case.[49]

Students' responses to these questions should not be interpreted as indicating that few of them are actually reading at school. Clearly, reading in

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[49] Pappas, C. C. (1991). Fostering full access to literacy by including information books. *Language Arts, 68,* 449-462.

Crook, P. R., & Lehman, B. A. (1991). Themes for two voices: Children's fiction and nonfiction as "whole literature." *Language Arts, 68,* 34-41.

many forms takes place at school. According to the *NAEP 1992 Reading Report Card*, approximately two-thirds of fourth graders reported reading silently every day as a part of reading instruction.[50] However, the specific questions in the IRPR were asked of students as they were being shown pictures of actual magazines, information books, and storybooks. It is possible that students interpreted the question about their exposure to these reading materials in terms of whole books or magazines, not excerpts or similar types of text published in other forms. That is, students may be reading different types of text as a part of their reading program, but they may not be reading more common forms of reading material found outside of the classroom, such as magazines and books.

The Role of the Library

One major source of reading materials has traditionally been the library. As indicated in the IRPR data, libraries continue to be a significant resource for fourth graders. In fact, more than twice as many students indicated the library, rather than home or school, as a source for books they read on their own. While we know from previous NAEP reports that library use drops off at higher grades,[51] the IRPR data suggest that the library plays a prominent role in the literacy development of young children. Knowing that libraries are a primary source of recreational reading materials and understanding the importance of recreational reading in the development of lifelong readers certainly underscores the challenge for schools and communities to keep libraries stocked with interesting, engaging books, and to maintain as an inviting place for readers to visit frequently.

It was evident that students from the lower-third performing schools were more likely to read storybooks in the library than were students from the middle- or top-third performing schools. In addition, these students from the lowest performing schools were less likely than students from the top-performing schools to read any of the three reading material types in their homes. This presents an interesting situation for schools and communities in addressing the literacy needs of the most challenged of our students. If reading does not take place in students' homes at all, or only

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[50] Mullis, I. V. S., Campbell, J. R., Farstrup, A. E. (1993). *NAEP 1992 Reading Report Card for the Nation and the States*. National Center for Education Statistics: Government Printing Office, Washington, DC.

[51] Foertsch, M. A. (1992). *Reading In and Out of School*. National Center for Education Statistics. Washington, DC: Government Printing Office.

infrequently, it would seem that libraries may provide an alternative, literacy-supportive environment. Apparently, this may already be taking place in some communities since so many students indicated libraries as a source for recreational reading materials. However, the library is less commonly cited as a place to read. Whether or not promoting libraries as a place to read, as well as a place to obtain books, is a desirable goal may depend on what other locations and opportunities are available to students for reading.

Reading-Related Instructional Activities

Students' responses to the interview questions about their instructional experiences and the samples of their classroom work help to generate a portrait of how fourth graders are being taught to read. Nearly three-fourths of fourth-grade students in the study reported having some experience writing book reports and nearly two-thirds indicated that they had written stories about things they had read. Furthermore, 52 percent of these students brought at least one sample of a noncommercially prepared extended writing activity to the interview (Table 2.2), suggesting that this type of activity may have been somewhat common among fourth-grade classrooms. This is supported by information reported in the *NAEP 1992 Reading Report Card* — 56 percent of fourth graders reported writing at least once a week about something that was read during reading class.[52]

The relationship between reading and writing has been discussed in numerous articles and books by educators and researchers.[53] The fact that frequent writing in response to reading has a positive relationship with higher reading proficiency is supported by these IRPR data as well as data from the *NAEP 1992 Reading Report Card*. Nevertheless, it is also clear that much of students' time in reading class is directed toward activities that are predominantly skills-oriented and do not integrate writing and reading.

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[52] Mullis, I. V. S., Campbell, J. R., & Farstrup, A. E. (1993). *NAEP 1992 Reading Report Card for the Nation and the States*. National Center for Education Statistics. Washington, DC: Government Printing Office.

[53] Tierney, R. J., & Shannahan, T. (1991). Research on the reading-writing relationship: Interactions, transactions, and outcomes. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of Reading Research, 2*, 246-280, New York: Longman.

Smith, C. (1988). Does it help to write about your reading? *Journal of Reading, 32*(3), 276-277.

Heise, L. L. (1988). *The Effects of Writing on Elementary School Students' Reading Comprehension*. Indiana University at South Bend.

This is made apparent in the finding that 38 percent of the students brought commercially prepared skills-oriented activities to the IRPR interview (Table 2.2). Furthermore, data from the *NAEP 1992 Reading Report Card* suggest that students may be spending quite a bit of time on these types of tasks. According to the national assessment results, 51 percent of fourth graders indicated that they worked in a reading workbook or on a worksheet almost every day.[54]

While it was unclear from the national assessment results exactly what those workbook and worksheet activities may have entailed, the IRPR work samples help to make the nature of fourth-grade instructional activities more evident. Nearly all of the commercially prepared materials that students brought to the IRPR interview were clearly a part of some published workbook or worksheet series. Therefore, it is noteworthy that very few of these work samples actually involved extended writing — in fact, only 6 percent of students brought at least one commercially prepared extended writing sample. In comparison, 23 percent of students brought a commercially prepared short-writing activity and 38 percent brought a commercially prepared skills-oriented activity. These data seem to suggest that the type of work regarded as "workbook and worksheet" activities in the main assessment and described as "commercially prepared" in the IRPR study consists mostly of simple skills-oriented or short writing tasks and requires very little extended writing.

There has been some indication over the last few years that commercially prepared instructional programs have progressed beyond isolated drill exercises.[55] In fact, there was some indication that many of the commercially prepared work samples presented during the IRPR interviews required students to engage in at least some brief writing. However, relatively few of the students brought sample papers that could be classified as commercially prepared extended writing activities, indicating that perhaps many of the published instructional activities that are typically utilized in fourth-grade classrooms continue to consist mostly of simple skills-oriented tasks.

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[54] Mullis, I. V. S., Campbell, J. R., & Farstrup, A. E. (1993). *NAEP 1992 Reading Report Card for the Nation and the States*. National Center for Education Statistics. Washington DC: Government Printing Office.

[55] Hoffman, J. V., McCarthey, S. J., Abbot, J., Christian, C., Corman, L., Curry, C., Dressman, M., Elliot, B., Matherne, D., & Stahle, D. (1994). So what's new in the new basals? A focus on first grade. *Journal of Reading Behavior*, 26(1), 47-73.

Freeman, Y. S., & Murphy, S. (1988). *Report Card on Basal Readers*. Katonah, NY: Richard C. Owen.

Students' Thinking About Their Own Work

Students' thinking about their own work may play a key role in developing the self-awareness, self-reflection, and self-monitoring that has come to be associated with the concept of metacognition in learning.[56] Research has shown the importance of being able to reflect upon one's own thinking and learning activities.[57] Being aware of what should be learned, and having some idea of what constitutes a successful attempt at a particular task may be critical factors in developing cognitive skills. The IRPR data on students' awareness and evaluation of their own work contributes to this growing body of information (Table 2.6).

From 4 to 8 percent of fourth graders did not know what they were learning when they completed instructional activities like the ones they brought to the IRPR interview. However, only 49 percent to 64 percent were able to identify a skill or ability they were learning from their respective instructional activities. The remaining students cited something about how to complete the task or some aspect of the content of the material, but they appeared not to know what they were supposed to be learning by completing their work (Table 2.5). In addition, 7 percent to 17 percent of the students did not know on what basis to determine if they had done a good job on their classroom work. Furthermore, less than one-fifth across all the types of work stated an internal criteria for evaluating their work. The majority of students relied on external sources for making these judgments. Further research may be called for here to determine developmentally what should be expected from fourth graders.

The results from students' discussions about their classroom work are mostly consistent with other research that stresses the need for students to be brought into the process of learning more often by being made aware of the goals and criteria for such activities. Educators since Dewey have focused on this need to make students participants in learning, rather than mere recipients.[58] However, to become a participant, and ultimately the overseer of one's own learning, students must first become aware of what and why they are learning as they complete their daily classroom activities. The IRPR interview data suggest that fourth graders may not be consistently active participants in their education since many were unable to describe

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[56] Hiller, S. (1990). Metacognition and reading: Implications for instruction. *Reading*, 24(3), 151-156.

[57] Marrit, S. (1992). The role of metacognition in reading instruction. *Scandinavian Journal of Educational Research*, 36(3), 211-221.

[58] Dewey, J. (1916). *Democracy and Education*. New York: The Free Press.

Bruner, J. (1961). *The Process of Education*. Cambridge, MA: Harvard University Press.

Gardner, H. (1991). *The Unschooled Mind*. New York: Basic Books.

what skill they were learning and relatively few expressed internalized sources of evaluation.

Interviewing as an Assessment Tool

The individual interview format used in the IRPR special study afforded a more in-depth examination of students' habits and perceptions related to their literacy development. Engaging students in one-on-one conversations about their experiences provides us with the kind of close-up observation that is not feasible when groups of students are responding with paper and pencil. Furthermore, being able to discuss the work students completed in their classrooms brings this approach directly in line with what has been termed, "situated assessments," in which progress is assessed through meaningful, learning-centered activities.[59]

The IRPR represents the first attempt to conduct a large-scale interview assessment for the measurement of literacy development. The information provided in this report regarding students' independent and instructional reading practices — as well as the information provided in the other additional IRPR report about students' oral reading fluency — demonstrate clearly the depth and breadth of information that can be collected about what students know and can do in reading. Freed from the constraints of a group-administered, paper-and-pencil questionnaire, the IRPR interview allowed for more personalized responding on the part of the students and encouraged candid reactions to questions about their instruction and their individual reading habits.

Using Literacy Interviews in the Classroom

As educators search for more appropriate methods of documenting the growth of their students in the area of reading and literacy, procedures like the IRPR may provide a valuable resource. For example, working with students individually affords tremendous opportunity, not only for collecting data, but also for supporting and encouraging students in their literacy pursuits. Asking students about their recreational reading experiences, or questioning them about their perceptions of classroom work

[59] Garcia, G. E., & Pearson, P. D. (1991). The role of assessment in a diverse society. In E. H. Hiebert (Ed.), *Literacy for a Diverse Society*. New York: Teachers College, Columbia University.

may, at the very least, focus students on these important topics. Moreover, these discussions can support students' learning and demonstrate its importance by involving them cognitively as well as affectively in thoughtful consideration of their literacy activities.

Another reason that an IRPR-type assessment may be a valuable resource for teachers is its broad view of what constitutes literacy development. Since the release of *Becoming a Nation of Readers,*[60] educators have become increasingly aware of the wide array of abilities, characteristics, and habits that contribute to students developing into "lifelong readers." An IRPR-type interview assessment provides ample opportunity for observing and documenting a multitude of literacy behaviors. Just as the IRPR was developed to enhance and expand on the main fourth-grade NAEP reading assessment, a similar interview method could be used in classrooms to augment existing assessments and could be incorporated into the overall instructional program. Teachers may ask classroom-specific or student-specific questions to gain the most pertinent information about their teaching effectiveness and students' learning. Furthermore, an interview format as an assessment instrument offers flexibility, making it applicable for nearly any student at any ability level.

Implications for Large-Scale Assessments

As a special study, the IRPR allowed for more intensive examinations of literacy development than has been possible with traditional paper-and-pencil assessments and surveys. These findings can support and enhance data that are collected in the main NAEP assessment. Important qualitative information about students' educational development elicited through one-on-one interviews and performance measures can augment the extensive quantitative information gained through the main assessment. While the yield for parents, educators, and researchers is important information to help guide educational decisions, the effort and cost required in conducting complex, performance-based assessments must be acknowledged.

The kinds of assessment procedures that may be manageable in classroom applications can present daunting challenges for large-scale

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[60] Anderson, R. C., Hiebert, E. H., Scott, J. A., Wilkinson, I. A. G. (1985). *Becoming a Nation of Readers: The Report of the Commission on Reading.* Washington, DC: National Institute of Education.

administration. A study like the IRPR that involves students in individual interviews and performances requires significant amounts of preparation, planning, and coordination to conduct on a large-scale basis. The materials, equipment, and their handling present exceptional challenges. Furthermore, data collected through interviews must by transcribed from audiotapes before trained scorers can begin the work of rating and coding students' responses. Clearly, the effort is massive.

It is possible that the implementation of large-scale assessments or performance records like this one may not be feasible for all programs. However, NAEP provides a unique environment in which to explore innovative assessment instruments like this one. The national assessment, conducted biennially, affords important opportunities to work with national samples and to link special studies with large-scale assessments of educational progress. As demonstrated in this report, important and worthwhile information can be gained through such efforts.

Summary of Implications

The IRPR data can be used in connection with current understandings about reading and reading instruction to help focus parents' and teachers' efforts in promoting students' reading achievement. The results of this study underscore several activities warranting consideration by schools and communities as they seek to support the literacy development of children.

- Young readers, especially those at risk, need many opportunities to read. Furthermore, reading experiences should be broad enough to include multiple forms of reading materials (e.g., information books, magazines, and storybooks). IRPR data support a clear relationship between broad reading experiences and reading proficiency.
- Responding to reading is an important part of reading development. Students can write about what they read and talk about their reading with peers, teachers, and family members. These activities appear to have some relationship to overall reading proficiency.

- Making books available to students is a critical first step in encouraging reading habits. The library continues to play a central role in providing students with books to read for their own enjoyment.
- Students may not always understand why they are given classroom assignments or how they can tell if they have done a good job on their work. It is important to bring students into the process of learning, by helping them to understand the purposes and evaluation criteria for their classroom work.
- Talking to students about their reading habits and instructional experiences can reveal much about their literacy development. Interview assessment techniques may have broad applicability as a tool for observing students' progress and making students active participants in their own evaluation.

NAEP's 1992 IRPR administration represented another step toward reinventing large-scale literacy assessments to more closely match classroom instruction as well as to better represent our evolving understanding of how students develop literacy abilities. Undoubtedly, many new challenges and issues for discussion will emerge out of the synergy of theory and practice in the classroom. However, through this special study as well as through numerous other efforts across the country, it has been demonstrated that educational assessment can move beyond paper-and-pencil testing with differing techniques that explore students' literacy development, assess a range of responses to reading, observe their oral fluency, and weigh proficiency from the many perspectives of student communication. The 1992 IRPR may help to recast our thinking about how best to document children's growth in reading.

Appendix A

Integrated Reading Performance Record Interview Guide

RECORD COUNTER NO. |_|_|_|

SECTION A. INTRODUCTION

We are trying to learn more about how children in the United States read and I am very pleased that you're willing to help us with our project. I'm going to be asking you some questions about books that you read. I'll be asking you to read some things for me and we'll talk about the work you do in school.

This won't affect your grades and won't be shown to your teacher or parents.

Just take your time and do your best.

I'll be using this tape recorder and will take notes so I won't miss anything. Do you have any questions?

I'd like for you to help me check the tape recorder to make sure it's working. I'd like you to help me do this by reading aloud part of this story.

HAND STUDENT INTRODUCTORY PASSAGE. TURN ON TAPE RECORDER.

Start at the beginning of the story and begin reading aloud. I'll tell you when to stop.

BOX 1	■ ALLOW STUDENT TO READ ENTIRE PASSAGE. WHEN FINISHED ■ DESCRIBE STUDENT'S ABILITY TO READ INTRODUCTORY PASSAGE: (CHECK ONE) ☐ Read with ease. ☐ Read with some difficulty. ☐ Read with much difficulty.

RECORD COUNTER NO. |_|_|_|

That was fine. Now let's play back the tape.

BOX 2	PLAY BACK FOR A FEW SECONDS BY DEPRESSING *REVIEW* BUTTON. **IF TOO SOFT:** Please talk just a little bit louder so that I don't miss anything you say. INCREASE VOLUME. **IF TOO LOUD,** DECREASE VOLUME. **IF RECORDING WAS CLEAR:** That sounds just fine. Now I think we're ready to go ahead. RESET TAPE TO END OF STUDENT'S READING.

RECORD COUNTER NO. |_|_|_|

I'd like to talk with you about the kinds of things you read. I'm going to show you some pictures of different kinds of things people read, and I'd like you to tell me if you ever read things like these.

SHOW PHOTOGRAPH (BLUE BACKGROUND – MAGAZINES)

A-1. This picture shows examples of some magazines. Do you ever read magazines?

PUT PHOTOGRAPH ASIDE

☐ NO (SKIP TO A-2)

☐ YES, ASK: 1a. Can you name some magazines you read?

1b. Where do you read these magazines?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

Do you read magazines like these . . .

- At home?
- Any place else?

SHOW PHOTOGRAPH (GOLD BACKGROUND – STORIES)

A-2. People sometimes read books like these that tell a story. Do you ever read books that tell a story?

PUT PHOTOGRAPH ASIDE

☐ NO (SKIP TO A-3)

☐ YES, ASK: 2a. Can you name a few for me that you have read?

2b. Where do you read these books?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

Do you read storybooks like these . . .

- At home?
- Any place else?

SHOW PHOTOGRAPH (GRAY BACKGROUND – INFORMATIONAL TEXTS)

A-3. This picture shows some books that give information or tell you how to do something. Do you ever read books that give information?

PUT PHOTOGRAPH ASIDE

☐ NO (SKIP TO SECTION B)

☐ YES, ASK: 3a. Can you name a few for me that you have read?

3b. Where do you read these books?

IF RESPONSE IS VAGUE OR UNCLEAR, READ AND CHECK ALL THAT APPLY.

Do you read information books like these . . .

- At home?
- Any place else?

RECORD COUNTER NO. |_|_|_|

SECTION B. INSTRUCTIONAL READING

Let's talk about some of the things you read when you are being taught reading in school.

B-1. Did you bring the book you mainly read when you are taught reading?

☐ YES (RECORD TITLE, DATE, AND PUBLISHER)

_____

_____

☐ **IF NO, ASK:** Do you know the name of that book? (RECORD TITLE)

_____

_____

(SKIP TO B-2)

B-2. How often do you read this book in reading class?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

Do you read this book . . .

- Every day?
- 2-3 times a week?
- Once a week?
- Other? (EXPLAIN)

B-3. Did you choose the book you're taught from or did your teacher assign you to read it?

B-4. Are you enjoying the (book)?

Why or Why not?

IF "INTERESTING": What made it interesting?

IF "BORING": What makes it boring?

B-5. Are you reading anything else for reading class?

IF YES: What other things?

B-6. Do you ever read things that you choose in reading class?

IF YES: What other things?

B-7. Have you written any of the following about things you've read for reading class:

- Book reports?
- Stories?
- Journal entries?
- Anything else? (EXPLAIN)

B-8. Do you have a chance to talk in class with other students about what you are reading?

RECORD COUNTER NO. |_|_|_|

SECTION C. INDEPENDENT READING

Now let's talk about the things you read on your own.

C-1. Are you reading any other books in your free time besides the ones your teachers assign you to read?

- ☐ NO: In the last few months, have you read any other books in your free time?
  - ☐ NO (GO TO C-7)
  - ☐ YES (GO TO C-2)
- ☐ YES (GO TO C-2)

		BOOK 1	BOOK 2
C-2.	What are the names of the books you are reading (have read)? (RECORD TITLE)	_____	_____
		_____	_____
C-3.	Let's talk about (BOOK #1/#2) Did you bring (BOOK #1/#2) with you? (IF YES, RECORD DATES AND PUBLISHER.)	_____	_____
		_____	_____
		_____	_____
C-4.	Have you finished it?	☐ NO (C-3, NEXT BOOK)	☐ NO (C-3, NEXT BOOK)
		☐ YES (C-5)	☐ YES (C-5)
C-5.	When did you finish (BOOK 1/ BOOK 2)?	☐ WITHIN LAST MONTH	☐ WITHIN LAST MONTH
		☐ SINCE BEGAN THIS SCHOOL YEAR	☐ SINCE BEGAN THIS SCHOOL YEAR
		☐ DURING SUMMER	☐ DURING SUMMER
		☐ MORE THAN A YEAR AGO	☐ MORE THAN A YEAR AGO
		(REPEAT C-3 – C-5 FOR BOOK 2)	GO TO C-6

C-6. SELECT BOOK FINISHED (READ) MOST RECENTLY: What was (is) (NAME OF BOOK) about (so far)?

C-7. Are you given time to read books of your own choosing in school?

☐ NO (GO TO C-8)

☐ YES: How often?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

- Every day?
- 2-3 times a week?
- Once a week?
- Other?

C-8. Do you talk about books you've chosen to read with:

- Your classmates or friends?
- Your teacher?
- Family or people you live with?
- Anybody else?

IF YES, PROBE: "With whom?"

C-9. Think about all the books you read. Do you keep any lists of these books?

☐ NO (SKIP TO C-10)

☐ YES: Do you keep a list of books you read for:

- Yourself?
- Your teacher?
- Anybody else?

IF YES, PROBE: "For whom?"

RECORD COUNTER NO. |_|_|_|

C-10. Where do you get the books you read on your own?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

- Do you take books home from school?
- Do you read books that are in your home?
- Do you get books from the public library?

	IF YOU DETERMINED STUDENT READ INTRODUCTORY PASSAGE:	
BOX 4	☐ With ease ☐ With some difficulty	**SAY:** Before we go on, I need to turn the tape over. FAST FORWARD TO END. TURN TAPE OVER. SET COUNTER TO 000. GO TO SECTION D – NAEP ASSESSMENT PASSAGE, PAGE 9.
	☐ With much difficulty	GO TO SECTION E – EXAMPLES OF SCHOOLWORK, PAGE 14.

RECORD COUNTER NO. ⌊_⌋⌊_⌋⌊_⌋

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SECTION D. NAEP ASSESSMENT PASSAGE

- **SILENT READING:**

Now I would like you to look at a story that you read earlier and read it again to yourself. Then I'll ask you questions about the story.

GIVE STUDENT NAEP PASSAGE.

Let me know when you are finished reading. Begin reading now.

WHEN STUDENT IS FINISHED, **RECORD COUNTER NO.** |___|___|

- **SUMMARY QUESTIONS:**

I want to ask you a few questions about this story. I know that you wrote answers to these questions before, but since I won't see what you wrote I would like you to answer them again for me. Don't worry about what you wrote before; just do the best you can to answer the question completely. You can look back at the story to help you answer the questions. This is the first question:

SHOW Q1 AND READ

D-1. "What do Turtle's actions at Spider's house tell you about Turtle?"

PAUSE

- **IF ANSWER:** Is there anything else? (GO TO D-2)
- **IF NO ANSWER OR "I DON'T KNOW":** You can look back at the story to help you answer the question.
  - **IF ANSWER:** Is there anything else? (GO TO D-2)
  - **IF NO ANSWER OR "I DON'T KNOW":** Ok, let's go on to the next question. (GO TO D-2)

D-2. This is the next question. *SHOW Q2 AND READ.*

"Who do you think would make a better friend, Spider or Turtle? Explain why."

PAUSE

- **IF ANSWER:** Is there anything else? (GO TO D-3)
- **IF NO ANSWER OR "I DON'T KNOW":** You can look back at the story to help you answer the question.
  - **IF ANSWER:** Is there anything else? (GO TO D-3)
  - **IF NO ANSWER OR "I DON'T KNOW":** Ok, let's go on to the next question. (GO TO D-3)

D-3. The last question is:

SHOW Q3 AND READ:

"Think about Spider and Turtle in the story. Pick someone you know, have read about, or have seen in the movies or on television and explain why that person is like either Spider or Turtle."

PAUSE

- **IF ANSWER:** Is there anything else? (GO TO MISCUE CODING)
- **IF NO ANSWER OR "I DON'T KNOW":** You can look back at the story to help you answer the question.
  - **IF ANSWER:** Is there anything else? (GO TO MISCUE CODING)
  - **IF NO ANSWER OR "I DON'T KNOW":** Ok, let's go on to the next question. (GO TO MISCUE CODING)

RECORD COUNTER NO. |_|_|_|

I'd like you to read the story aloud as if you're reading it to someone who's never heard it before. Some of the words might be hard to read, but just do the best you can. If you can't figure a word out, you can guess or skip it and go on, but I won't be able to help you with it. I'll tell you when to stop reading. You won't be reading the whole story. Please start at the beginning now.

RECORD COUNTER NO. |_|_|_|

HUNGRY SPIDER AND THE TURTLE

by Harold Courlander and George Herzog

Line #		Cumulative Number of Words per Line
1	Spider was a hungry one, he always wanted to eat. Everybody in Ashanti knew about his	16
2	appetite. He was greedy, too, and always wanted more than his share of things. So people	32
3	steered clear of Spider.	36
4	But one day a stranger came to Spider's habitation out in the back country. His name was	53
5	Turtle. Turtle was a long way from his home. He had been walking all day in the hot sun, and	73
6	he was tired and hungry. So Spider had to invite Turtle into his house and offer him something	91
7	to eat. He hated to do it, but if he didn't extend hospitality to a tired traveler it would get	111
8	around the countryside and people would soon be talking about Spider behind his back.	125

IF STUDENT IS HAVING DIFFICULTY READING, STOP HIM/HER HERE BY SAYING:

Thank you for reading that for me.

PLACE A SLASH MARK (/) AFTER THE LAST WORD READ BY THE STUDENT.

RECORD COUNTER NO. |_|_|_|

9	So he said to Turtle:	130
10	"There is water at the spring for you to wash your feet in. Follow the trail and you'll get	149
11	there. I'll get the dinner ready."	155
12	Turtle turned and waddled down to the spring with a gourd bowl as fast as he could. He	173
13	dipped some water from the spring and carefully washed his feet in it. Then he waddled back	190
14	up the trail to the house. But the trail was dusty. By the time Turtle got back to the house his	211
15	feet were covered with dirt again.	217
16	Spider had the food all set out. It was steaming, and the smell of it made Turtle's mouth	235
17	water. He hadn't eaten since sunrise. Spider looked disapprovingly at Turtle's feet.	247
18	"Your feet are awfully dirty," he said. "Don't you think you ought to wash them before	267
19	you start to eat?"	284
20	Turtle looked at his feet. He was ashamed, they were so dirty. So he turned around and	303
21	waddled as fast as he could down to the spring again. He dipped some water out of the spring	311
22	with the gourd bowl and carefully washed himself.	

STOP STUDENT HERE BY SAYING: Thank you for reading that for me.

RECORD COUNTER NO. |_|_|_|

SECTION E. EXAMPLES OF SCHOOLWORK

Now I'd like to talk to you about your schoolwork.

E-1. Did you bring any (I see that you've brought) schoolwork with you to show me?

- ☐ YES: What work did you bring with you? (SKIP TO E-2)
- ☐ NO: Is there a reason why you didn't bring any work? (SKIP TO SECTION F, PAGE 16)

E-2. Who decided which papers to bring?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

- Your teacher or reading teacher?
- You decided on your own?
- Other (EXPLAIN)

E-3. How many papers did you bring with you?

- ☐ 1 (GO TO E-5)
- ☐ 2 OR 3 (GO TO E-4)
- ☐ 4 OR MORE: I'd like you to choose the 3 papers that you think are most like the assignments you usually do in reading class. (AFTER STUDENT PICKS 3, GO TO E-4)

E-4. I'm going to label these papers so that when I look at them later, I'll remember the order in which we discussed them.

NUMBER PAPERS 1, 2, 3, USING POST-IT NOTES IF STUDENT BROUGHT ORIGINALS.

E-5. Let's talk about this paper.

PAPER #1

E-5a. How often do you do work like this?

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

- Every day?
- 2-3 times a week?
- Once a week?
- Other (EXPLAIN)

RECORD COUNTER NO. |_|_|_|

E-5b. How do you know if you did a good job?

E-5c. What do you learn from doing this kind of work?

E-5d. Is there anything else you want to tell me about this paper?

PAPER #2

E-6a. How often do you do work like this? (POINT TO PAPER 2)

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

- Every day?
- 2-3 times a week?
- Once a week?
- Other (EXPLAIN)

E-6b. How do you know if you did a good job?

E-6c. What do you learn from doing this kind of work?

E-6d. Is there anything else you want to tell me about this paper?

PAPER #3

E-7a. How often do you do work like this? (POINT TO PAPER 3)

IF RESPONSE IS VAGUE OR UNCLEAR, ASK:

- Every day?
- 2-3 times a week?
- Once a week?
- Other (EXPLAIN)

E-7b. How do you know if you did a good job?

E-7c. What do you learn from doing this kind of work?

E-7d. Is there anything else you want to tell me about this paper?

BOX 5	**IF STUDENT BROUGHT COPIES OF SCHOOLWORK, SAY:** I'd like to keep these copies to look at later. (GO TO SECTION F, CLOSING) **IF STUDENT BROUGHT ORIGINALS OF SCHOOLWORK, SAY:** I'll bring these papers back to your teacher so I can make copies to look at later. (GO TO SECTION F, CLOSING)

RECORD COUNTER NO. ⌊_⌊_⌊_⌋

SECTION G. ADMINISTRATOR'S SUMMARY

A. Overall summary of student's behavior (level of interest, attention, understanding, effort, etc.)

_____

_____

_____

B. Any special circumstances affecting this interview? _____

_____

_____

_____

C. Who attended the interview?

☐ NAEP OBSERVER

☐ SCHOOL STAFF, INCLUDING TEACHER **[ASK D]**

☐ OTHER **[SPECIFY]**

D. IF SCHOOL STAFF OBSERVED THE INTERVIEW, ASK THEM:

1. How do you think the interview went? _____

_____

_____

2. Do you have any suggestions for improving the interview process?

_____

_____

E. Any other comments? _____

_____

_____

_____

SECTION F. CLOSING

Thank you (STUDENT'S NAME)! I really appreciate your coming and helping us today. We have a thank you gift for you. You can pick one of these books to take home.

LET STUDENT PICK ONE BOOK.

Make sure to take your books back with you. Thanks again.

STOP TAPE

Appendix B

Procedures and Methods

The 1992 NAEP Integrated Reading Performance Record (IRPR) was developed as a special study to augment the 1992 NAEP reading assessment. The 1992 assessment of reading was marked by several innovative features in addition to those embodied in the IRPR. A new framework had been developed under the direction of the National Assessment Governing Board that moved the NAEP reading assessment toward a more interactive and dynamic view of the reading process.[61] The assessment relied heavily on constructed-response questions to assess fourth-, eighth-, and twelfth-grade students' ability to interpret, to respond personally to, and to think critically about the text. Also, reading was measured according to three different purposes for reading — *reading for literary experience, reading to gain information, and reading to perform a task.* (Reading to perform a task was not assessed at grade 4.)

[61] *Reading Framework for the 1992 and 1994 National Assessment of Educational Progress.* National Assessment Governing Board. Washington, DC: Government Printing Office.

Developing the IRPR

The IRPR extended these innovations in large-scale assessment by drawing on extant research and practices in classroom literacy assessment to construct an additional instrument, implementing those concepts at a national level. A committee was assembled to oversee the development of both the field test version and operational version of the IRPR. The committee members were drawn from leading researchers and educators in the field of reading with specific expertise in interview assessments and oral reading fluency. The members of the 1992 IRPR development committee are presented in Figure B.1.

Figure B.1
IRPR Development Committee Members

Member	Affiliation
Dr. Philip Gough	University of Texas
Dr. Barbara Kapinus	Maryland Department of Education
Dr. John Pikulski	University of Delaware
Dr. Gay Sue Pinnell	Ohio State University
Dr. Karen Wixson	University of Michigan

Additional consultation was provided by Dr. Elfreida Hiebert of the University of Colorado.

The committee held a total of four meetings to oversee the development, implementation, analysis, and reporting of the *Integrated Reading Performance Record*.

A field test of the IRPR was conducted in 1991 with a sample of approximately 500 students. Based on the results of that field test and information from field administrators, the committee made several revisions to the instrument to increase its usefulness and ease of administration. The interview guide presented in Appendix A is the final version of the IRPR produced by the committee before the 1992 administration.

The IRPR Design and Administration

The IRPR was developed to gather information from students in a one-on-one assessment format focusing on the following aspects of literacy development: independent reading activities and habits, instructional reading activities and habits, perceptions of classroom work in reading, and oral reading proficiency. In addition, a special component built into the IRPR addressed the question of response mode differences in students' demonstrations of reading comprehension. The results of the response mode comparison study are presented in a separate NAEP report, *Reading Assessment Redesigned: Authentic Texts and Innovative Instruments in NAEP's 1992 Survey* (in press).

The IRPR interviews were conducted with a subsample of the fourth-grade students who participated in the 1992 national reading assessment. Interviews typically took 30 to 40 minutes and were conducted at students' schools, usually in counselors' or administrators' offices. Teachers of potential sampled students were sent letters making them aware of the IRPR study and the need to have three student work samples available in the event any of their students were selected for participation. Sampling of IRPR participants took place at the school within a day or two of students' participation in the main reading assessment. Students who had been assigned a particular booklet in the main NAEP assessment were randomly chosen for the IRPR from among the grade-eligible students in a school. As with other NAEP assessments, schools were given the option of requiring parental permission before allowing students to participate.

Reporting Groups

This document contains results for the nation and groups of students defined by shared characteristics. Because of the limited nature of the IRPR sample, not all of the traditional NAEP reporting groups have been presented. However, since all the typical reporting groups were used to assess the comparability of the IRPR sample and the main assessment sample, they are described below.

Race/Ethnicity. Results are presented on some IRPR variables for students of different racial/ethnic groups based on the students' self-identification of race/ethnicity according to the following mutually exclusive categories: White, Black, Hispanic, Asian/Pacific Islander, and American Indian (including Alaskan Native). Based on statistically determined criteria, at

least 62 students in a particular subpopulation must participate in order for the results for that subpopulation to be considered reliable. Therefore, the data for Asian/Pacific Islander and American Indian students have not been presented in this report (except for purposes of comparing the IRPR sample to that obtained in the main assessment).

Gender. Results are reported for males and females. Gender was reported by the student.

Type of Community. Results are not reported, but were considered in comparing IRPR and main NAEP assessment samples. The four mutually exclusive community types are — advantaged urban, disadvantaged urban, extreme rural, and other — as described below. According to information about parents' occupation obtained from the Principal's Questionnaire completed by each sampled school, indices are developed so that for each assessment approximately 10 percent of the most extreme advantaged urban, disadvantaged urban, and rural schools are classified into the first three categories. The remaining approximately 70 percent of the schools are classified into the "other" category.

Advantaged Urban: Students in this group reside in metropolitan statistical areas and attend schools where a high proportion of the students' parents are in professional or managerial positions.

Disadvantaged Urban: Students in this group reside in metropolitan statistical areas and attend schools where a high proportion of the students' parents are on welfare or are not regularly employed.

Extreme Rural: Students in this group do not reside in metropolitan statistical areas. They attend schools in areas with a population below 10,000 where many of the students' parents are farmers or farm workers.

Other: Students in the "Other" category attend schools in areas other than those defined as advantaged urban, disadvantaged urban, or extreme rural.

Parents' Highest Level of Education. Results are not reported, but were considered in comparing the IRPR and the main NAEP assessment samples. As a part of the background questionnaire in the main assessment, students were asked to indicate the highest level education attained by either of their parents. The options that were provided for responding to this question were as follows — did not finish high school, graduated from high school,

had some education after high school, graduated from college, or "I don't know."

Sample

As described above, the IRPR sample was drawn from those students who had been assigned a particular assessment booklet during the main assessment. Table B.1 presents information regarding numbers of students eligible, sampled, and assessed with complete data records.

Table B.1

Eligible and Sampled Students

Number of eligible students with designated booklet		1664
Eligible for IRPR, but not included in final sample:		
tape missing/lost/destroyed in shipping	292	
student did not attend main assessment	70	
sampled but student refused IRPR	4	
sampled but parent refused IRPR	1	
sampled but did not come to IRPR	37	
nonspecified reason	124	
Total	528	– 528
Number of students in final IRPR sample		1136

In reporting results from this special study, the participation rate was clearly of some concern. Obtaining only 68 percent of the intended sample came close to precluding any generalization to the selected population — the nation's fourth-graders. As a result, an investigation of the demographic characteristics of the IRPR sample was conducted to ensure comparability with the main NAEP sample of fourth-grade students. The main assessment national sample was based on a stratified, three-stage sampling plan that ensured a nationally representative sample. The IRPR sample was a random sample of the fourth graders in the main assessment; thus, it was expected that the original IRPR sample would be nationally representative.

Tables B.2 and B.3 present pertinent data regarding the make-up and the characteristics of the IRPR sample compared to the main assessment fourth-grade sample. Those students who participated in the IRPR study are compared to all students in the main assessment on average proficiency

Table B.2

Percentages, Total Numbers, and Average Proficiencies of Fourth Graders in the IRPR and Fourth Graders in the Main Reading Assessment by Demographic Characteristics, Grade 4, 1992 NAEP Integrated Reading Performance Record

	Percentage and Total Number of IRPR Sample	Percentage and Total Number of Main Assessment	Average Proficiency of IRPR Sample	Average Proficiency of Main Assessment
Race/Ethnicity				
White	72 (0.9) N = 716	71 (0.2) N = 3917	226 (2.1)	226 (1.2)
Black	15 (0.9) N = 170	16 (0.1) N = 1013	196 (3.7)	193 (1.7)
Hispanic	9 (0.6) N = 176	9 (0.1) N = 1044	203 (3.5)	202 (2.2)
Asian/Pacific Islander	2 (0.5) N = 42	2 (0.3) N = 201	209 (5.4)	216 (3.3)
American Indian	2 (0.4) N = 27	2 (0.2) N = 117	215 (8.7)	208 (4.7)
Parents' Level of Education				
Grad. College	40 (2.0) N = 437	39 (1.1) N = 2481	226 (2.3)	227 (1.4)
Post H.S.	9 (1.0) N = 94	9 (0.5) N = 529	225 (3.7)	224 (2.2)
High School	13 (1.6) N = 151	12 (0.6) N = 769	216 (3.5)	213 (1.7)
No High School	3 (0.6) N = 45	4 (0.4) N = 291	199 (6.7)	199 (2.7)
I don't know	34 (2.0) N = 408	36 (1.0) N = 2228	212 (2.8)	211 (1.2)
Type of Community				
Extreme Rural	12 (2.1) N = 111	12 (2.2) N = 608	220 (5.1)	220 (3.0)
Urban Disadv.	8 (1.3) N = 131	9 (1.2) N = 742	193 (4.4)	188 (2.7)
Urban Adv.	10 (1.9) N = 124	10 (1.9) N = 693	236 (5.9)	240 (3.1)
Other	70 (2.8) N = 770	69 (2.9) N = 4231	219 (1.8)	218 (1.1)
Gender				
Male	50 (1.6) N = 560	51 (0.6) N = 3171	214 (2.2)	214 (1.2)
Female	50 (1.6) N = 576	49 (0.6) N = 3143	224 (2.2)	222 (1.0)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the population is within plus or minus two standard error of the estimated for the sample. In comparing two estimates, one must use the standard error of the differences.

Table B.3

Average Proficiencies of Fourth Graders in the IRPR and Fourth Graders in the Main Reading Assessment, Grade 4, 1992 NAEP Integrated Reading Performance Record

Average Proficiency of IRPR Sample	Average Proficiency of Main Assessment
219 (1.8)	218 (1.0)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty for each population of interest, the value for the population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference.

and representation of students by race/ethnicity, parents' highest level of education, type of community, and gender.

A review of these data revealed no significant, systematic differences between the demographic characteristics and performance of the IRPR students and the students in the main assessment. Therefore, the results of the 1992 IRPR are reported as representative of fourth-grade students across the country.

Drawing Inferences from the Results

The use of *confidence intervals*, based on the standard errors, provides a way to make inferences about the population means and proportions in a manner that reflects the uncertainty associated with the sample estimates. An estimated sample mean proficiency of ± 2 standard errors represents a 95 percent confidence interval for the corresponding population quantity. This means that with approximately 95 percent certainty, the average performance of the entire population of interest is within ± 2 standard errors of the sample mean.

As an example, suppose that the average reading proficiency of students in a particular group was 256, with a standard error of 1.2. A 95 percent confidence interval for the population quantity would be as follows:

$$\text{Mean} \pm 2 \text{ standard errors} = 256 \pm 2 \bullet (1.2) = 256 \pm 2.4 = 256 - 2.4 \text{ and } 256 + 2.4 = 253.6, 258.4$$

Thus, one can conclude with 95 percent certainty that the average proficiency for the entire population of students in that group is between 253.6 and 258.4.

Similar confidence intervals can be constructed for percentages, provided that the percentages are not extremely large (greater than 90) or extremely small (less than 10). For extreme percentages, confidence intervals constructed in the above manner may not be appropriate; however, procedures for obtaining accurate confidence intervals are quite complicated. Comparisons involving extreme percentages should be interpreted with this in mind.

To determine whether there is a real difference between the mean proficiency (or proportion of a certain attribute) for two groups in the population, one needs to obtain an estimate of the degree of uncertainty associated with the difference between the proficiency means or proportions of these groups for the sample. This estimate of the degree of uncertainty — called the standard error of the difference between the groups — is obtained by taking the square of each group's standard error, summing these squared standard errors, and then taking the square root of this sum.

Similar to the manner in which the standard error for an individual group mean or proportion is used, the standard error of the difference can be used to help determine whether differences between groups in the population are real. The difference between the mean proficiency or proportion of the two groups ± 2 standard errors of the difference represents an approximate 95 percent confidence interval. If the resulting interval includes zero, there is insufficient evidence to claim a real difference between groups in the population. If the interval does not contain zero, the difference between groups is statistically significant (different) at the .05 level.

The procedures described in this section, and the certainty ascribed to intervals (e.g., a 95 percent confidence interval) are based on statistical theory that assumes that only one confidence interval or test of statistical significance is being performed. When one considers sets of confidence intervals, such as those for the average proficiency of community types, statistical theory indicates that the certainty associated with the entire set of intervals is less than that attributable to each individual comparison from the set. If one wants to hold the certainty level for a specific set of comparisons at a particular level (e.g., .95), adjustments (called multiple-comparisons procedures) need to be made.

The standard errors for means and proportions in the NAEP reports are statistics and subject to a certain degree of uncertainty. In certain cases,

typically when the standard error is based on a small number of students or when the group of students is enrolled in a small number of schools, the amount of uncertainty associated with the standard errors may be quite large. Throughout this report, the symbol "!" designates estimates of standard errors subject to a large degree of uncertainty. In such cases, the standard errors — and any confidence intervals or significance tests involving these standard errors — should be interpreted cautiously.

ACKNOWLEDGEMENTS

The work presented herein represents the efforts of the hundreds of individuals who are necessary to implement a complex special study of this size and scope. From the considerable expertise, energy, and dedication required to develop and conduct NAEP's 1992 Integrated Reading Performance Record (IRPR) to that necessary to analyze and report it, many persons have made important and substantial contributions. Most importantly, NAEP is grateful to students and school staff who made the special study possible.

NAEP's 1992 Integrated Reading Performance Record was truly a collaborative effort among staff from the National Center for Education Statistics (NCES), the National Assessment Governing Board (NAGB), Educational Testing Service (ETS), Westat, and National Computer Systems (NCS).

The special study was funded through NCES, in the Office of Educational Research and Improvement of the U.S. Department of Education. Emerson Elliott, Commissioner, provided consistent support and guidance. The staff — particularly Gary Phillips, Peggy Carr, Susan Ahmed, and Sheida White — worked closely and collegially with ETS, Westat, and NCS staff and played a crucial role in all aspects of the program.

The members of the National Assessment Governing Board (NAGB) and the NAGB staff provided advice and guidance throughout. Their contractor for NAEP's reading consensus project, the Council of Chief State School Officers (CCSSO), worked diligently under tight time constraints to create the forward-looking framework underlying the assessment and the special studies.

NAEP owes a debt of gratitude to the panelists and consultants who provided their expertise and worked so conscientiously on developing the IRPR instrument and providing a frame for interpreting the results.

The NAEP project at ETS resides in the Center for Assessment of Educational Progress (CAEP) managed by Archie Lapointe. Under the NAEP contract to ETS, Ina Mullis served as Project Director. Stephen Koffler managed test development activities. Jay Campbell and Mary Foertsch worked with the IRPR Instrument Development Committee to develop the special study. Jules Goodison managed the operational aspects together with John Olson, and sampling and data collection activities were carried out by Westat under the direction of Renee Slobasky, Nancy Caldwell, and Keith Rust. Additional support was provided by Sandy Reider and Nancy Caldwell of Westat in the very important task of training IRPR

administrators. Distribution, scoring and processing activities were conducted by NCS, under the supervision of John O'Neill, Judy Moyer, Diane Smrdel, Lavonne Mohn, Brad Thayer, and Andrew Latham.

Statistical and psychometric procedures were led by John Donoghue under the direction of Eugene Johnson and John Mazzeo. Laura Jenkins performed the IRPR data analysis, assisted by David Freund. Jay Campbell, Barbara Kapinus, and Alexandra Beatty wrote the report with considerable editorial and production support from Kent Ashworth and Patricia Donahue. In addition, Sharon Jaspan contributed extensive research support. Many thanks are provided to the numerous reviewers, internal to ETS and NCES as well as external, who suggested improvements to successive drafts. Vickie Farber provided excellent word processing assistance essential to the project. A debt of gratitude is also owed to the publishers of *Highlights* magazine for their contribution of materials and permission to use the magazine as a part of the study.

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